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IDENTIFIERS	*Council for Exceptional Children

ABSTRACT

This final report describes the activities and accomplishments of a 3-year project to enhance the knowledge and skills of special and general educators as well as parents of children having attention deficit disorder through the development of training materials and workshops. Over 15 professional development activities on the topic of attention deficit hyperactivity disorder (ADHD) were conducted, ranging from 1-hour discussion sessions to multiple-day training workshops, involving approximately 700 participants. The project was able to collaborate with organizational units of the Council for Exceptional Children, its professional development program, and its dissemination channels. Collaboration with the National Association of Elementary School Principals also provided an important avenue of dissemination. The project developed a training manual with modules on: ADHD characteristics and identification, model school programs, effective classroom interventions, and policy/administrative issues. Workshops presented throughout the country and attended by representatives from every state were very positively evaluated by participants. Appendices include the training manual, the workshop evaluation form, and the contents page of a special issue on attention deficit disorder of the journal "Exceptional Children". Examples of other dissemination products are attached. (DB)

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ED 419 335

Continuing Education Strategies for Attention Deficit Disorders: Final Report

Project Number: H029K20403

Project Director:Bruce Ramirez
The Council for Exceptional Children
1920 Association Drive
Reston, VA 20191-1589

August 28, 1996

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PROJECT OVERVIEW

In 1992, The Council for Exceptional Children (CEC) was awarded a grant by the Office of Special Education Programs (OSEP) of the U.S. Department of Education entitled *A Continuing Education Program on Attention Deficit Disorder* (H029K20403). The goal of this three-year project was to enhance the knowledge and skills of special and general educators to better serve children with attention deficits. While special education teachers and administrators were the principal target audience of the project, the training materials and workshops were also intended for regular educators who have students with attention deficits in their classrooms, for other professionals, and for parents.

The project had four main objectives:

1. To develop training content and strategies
2. To conduct training
3. To disseminate training related information
4. To maintain an efficient and effective project management system

This report describes the accomplishments of the project and the activities associated with each objective.

IMPACT/ACCOMPLISHMENTS

The impact and accomplishments achieved during this project are displayed in Table I. Over fifteen professional development activities on the topic of (ADHD) were conducted by the project. These activities ranged from one-hour discussion sessions to multiple day training, and were attended by approximately 700 participants. One of the highlights of the project was the level of collaboration achieved between the project and other units within CEC as well as with professional groups within special education.

The collaboration within CEC occurred through the successful inclusion of project training within CEC's Professional Development Program. This resulted in convention poster and panel sessions, strands, and workshops; one-day workshops on ADHD scheduled prior to CEC's regional Inclusive School Institutes; and a one-day workshop as part of CEC's Professional Development Series in July, 1995. The project staff worked closely with CEC's Publications Unit on the videotape and manual developed in the project's final year. This professional development product *A Continuing Education Program on ADHD* is available through CEC's publication catalog, which will magnify the impact of the federal investment in this project. (A copy of the manual and videotape is included as Appendix A of this final report.)

The project also established a productive partnership with CEC's Council for Administrators of Special Education (CASE). During the first year of the project, a one-hour session was presented at CASE's annual conference, the following year a strand on ADHD was presented at the annual conference. As a result of the CASE strand a member of the Project Content Committee, Ann Welch, was invited by the Bureau of Indian Affairs (BIA), San Diego Regional Office, to present *Module III - Effective Classroom Interventions* at their annual conference. This unique opportunity enabled the project to reach a population that we had not anticipated involving in the project. In the project's final year, the annual CASE Institute was on the topic of ADHD and members of the Content Committee provided institute participants with 2½ days of training on the topic.

One of the most unique collaborative endeavors accomplished through the project was with the National Association of Elementary School Principals (NAESP). Since the majority of children with ADHD are educated in regular classrooms for most of the day, the opportunity to work with a group of regular education administrators on the topic of ADHD provided an important avenue for disseminating the most current information on the topic to an important constituency. This collaboration culminated in a full day preconference workshop at the NAESP annual conference in 1995.

OBJECTIVE 1: DEVELOP TRAINING CONTENT

The framework for developing the training involved a Content Committee consisting of educators experienced in the four module topic areas. The content specialists, who also served as trainers, developed, evaluated, and revised the content of the modules throughout the course of the project. The committee drew on the information produced by CEC's Task Force on Attention

TABLE 1 PROFESSIONAL DEVELOPMENT ACTIVITIES

DATE	ACTIVITY	EVENT/LOCATION
1/93	Small-Group Session	Annual Conference of the Council for Administrators of Special Education (CASE) St. Petersburg, FL
4/93	One Day Preconvention Workshop	CEC Annual Convention San Antonio, TX
11/93	One Day Seminar	Chantilly, VA
1/94	Six Hour Strand on ADHD	Annual CASE Conference San Diego, CA
4/94	One Day Preconvention Workshop Strand on ADHD (6 hours) Showcase Session on ADHD Policy and Administrative Issues (2 hours)	CEC Annual Convention Denver, CO
3/94	Module III presented at the Regional Office of the BIA	San Diego, CA
6/94	One Day Workshop	CEC Inclusive Schools Institute Orlando, FL
8/94	One Day Seminar	Reston, VA
10/94	One Day Workshop	CEC Inclusive Schools Institute Cherry Hill, NJ
11/94	Session on Multicultural Issues and ADHD	CEC Symposium on Multicultural Exceptional Learners, San Diego, CA
2/95	Two and one-half Day Institute	CASE Institute on ADHD Clearwater Beach, FL
2/95	One Day Workshop	CEC Inclusive Schools Institute Dallas, TX
4/95	One Day Preconvention Workshop	Annual Conference of National Association of Elementary School Principles (NAESP) San Diego, CA
4/95	One Day Preconvention Workshop Poster Session	Annual CEC Convention Indianapolis, IN
7/95	One Day Seminar	CEC Professional Development Series Washington, DC

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Deficit Disorder, the synthesis efforts of the federally funded research centers on ADD, and other field research and practice-based initiatives. The training was developed in four modular components that consumers could use either individually or in any combination to meet specific informational needs, and to support varying lengths of training. Furthermore, the modules were intended to be sufficiently comprehensive so that all trainers could deliver all aspects of the training, and so that new trainers could be prepared easily to deliver the training. In that manner, the training could be provided and replicated relatively inexpensively and thus could be made available to a wide audience. Initially three modules were developed: *Module I: Characteristics and Identification; Module II: Model School Programs; and Module III: Effective Classroom Interventions. Module IV: Policy and Administrative Issues* was developed in the second year of the project in response to questions regarding school-wide special education responsibilities for students with ADHD. The authors and a brief description of each module are provided on the following pages. Please refer to Appendix A for a copy of each module as presented in the training manual developed through the project.

Module I: Characteristics and Identification

> *The first module Characteristics and Identification provides a brief historical background of ADHD, followed by a clinical description of children with the disorder. Current definitions of ADHD are also presented. A model for the assessment process is offered, which takes into account emerging "best practice." The module includes important cultural and ethnic considerations that must be a part of the assessment and intervention process.*
>
> **Authors:**
>
> Ron E. Reeve, Ph.D., Associate Professor of Education and Director, Curry Programs in Clinical and School Psychology, University of Virginia

James V. Wright, Ed.D., Associate Professor, Department Head, Counselor, Leadership and Special Education, Auburn University at Montgomery

Module II: Model School Programs

The second module, ***Model School Programs****, addresses the issue of school reform and its impact on service delivery to children with ADHD. This module explores the rationale for a collaborative teaching approach between general and special educators and important features of this approach. Specific components necessary for success are included. The theme of honoring diversity, which was introduced in Module I, is expanded here with attention to ways of structuring classrooms that will honor diversity while maintaining high expectations.*

Author:

Mary Spessard, Director, Curriculum and Instruction, Coloma Community Schools, Coloma, Michigan

Module III: Effective Classroom Interventions

Module III, ***Effective Classroom Interventions****, focuses on specific classroom practices. Both Module II and Module III take the position that, in the large majority of cases, administrative, instructional, and management changes beneficial for students with ADHD are beneficial for everyone. When a teacher adds to his or her repertoire of skills to meet the needs of students with ADHD, those new skills can be used daily to benefit all students.*

Authors:

Ron Walker, M.A., Educational Consultant, Walker Educational Consulting, Inc., Gainesville, Georgia

Ann B. Welch, M.A., M.Ed., Resource Teacher and Educational Consultant and, Virginia L. Murray Elementary School, Albemarle County Public Schools, Charlottesville, Virginia

Module IV: Policy and Administrative Issues

*Module IV, **Policy and Administrative Issues**, covers the legal, administrative, and policy issues that are critical in designing and implementing appropriate programs for students with ADHD. The legal requirements for school under the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973 (504), and the Americans with Disabilities Act of 1990 (ADA) are explained and compared.*

(Please note: Given that new court rulings and other legal clarifications may be issued at any time, Module IV is seen as a dynamic rather than a static set of information. Thus, what is presented has to be seen as today's version of the status of legal and policy issues in ADHD, but not necessarily tomorrow's.)

Authors:

Ron E. Reeve, Ph.D., Associate Professor of Education and Director, Curry Programs in Clinical and School Psychology, University of Virginia

Judy Schrag, Ph.D., Vice President, VSA Educational Services, Learning Systems Group, Washington, DC

Ron Walker, M.A., Educational Consultant, Walker Educational Consulting, Inc., Gainesville, Georgia

The modules were designed as an integrated workshop, although each of the four modules can be presented separately. The amount of information presented in each module can be tailored to the needs of the immediate audience. For example, administrators may require a more in-depth treatment of the policy module and an abbreviated presentation on classroom intervention, while teachers may prefer the reverse.

It is important to note that the development of the training content was dynamic; it involved a rigorous process of continual review and revision. The Content Committee and project staff reviewed and updated the modules based on emerging information and developments on ADHD and evaluations provided by workshop participants. For example, Content Committee members discussed revisions on specific modules as well as on the overall curriculum and made changes accordingly. Considerations relevant to students from culturally and ethnically diverse backgrounds were woven throughout the training materials and not treated as a separate module or component. There was also a need for specific attention to the identification and assessment of students from diverse populations to be covered in Module I. As a result Dr. James Wright, an expert in the area contributed his expertise to the module development. Another example of how the content of the modules changed to reflect current knowledge, is the addition of *Module IV: Policy and Administrative Issues.* This module was added during the second year of the project to clarify some of the questions regarding provision of services for children with ADHD under federal legislation such as IDEA and Section 504.

OBJECTIVE 2: CONDUCT TRAINING

Members of the Content Committee delivered the training over the course of the three-year funding period. As stated in the *Impact and Accomplishments* section, the modules have been presented in different formats to a variety of audiences. Each participant received training materials which included each module, supporting articles, and extensive reference lists.

Figure 1 provides a visual representation of the locations of the professional development activities. The 700 participants included residents of every state in the U. S. as well as residents of

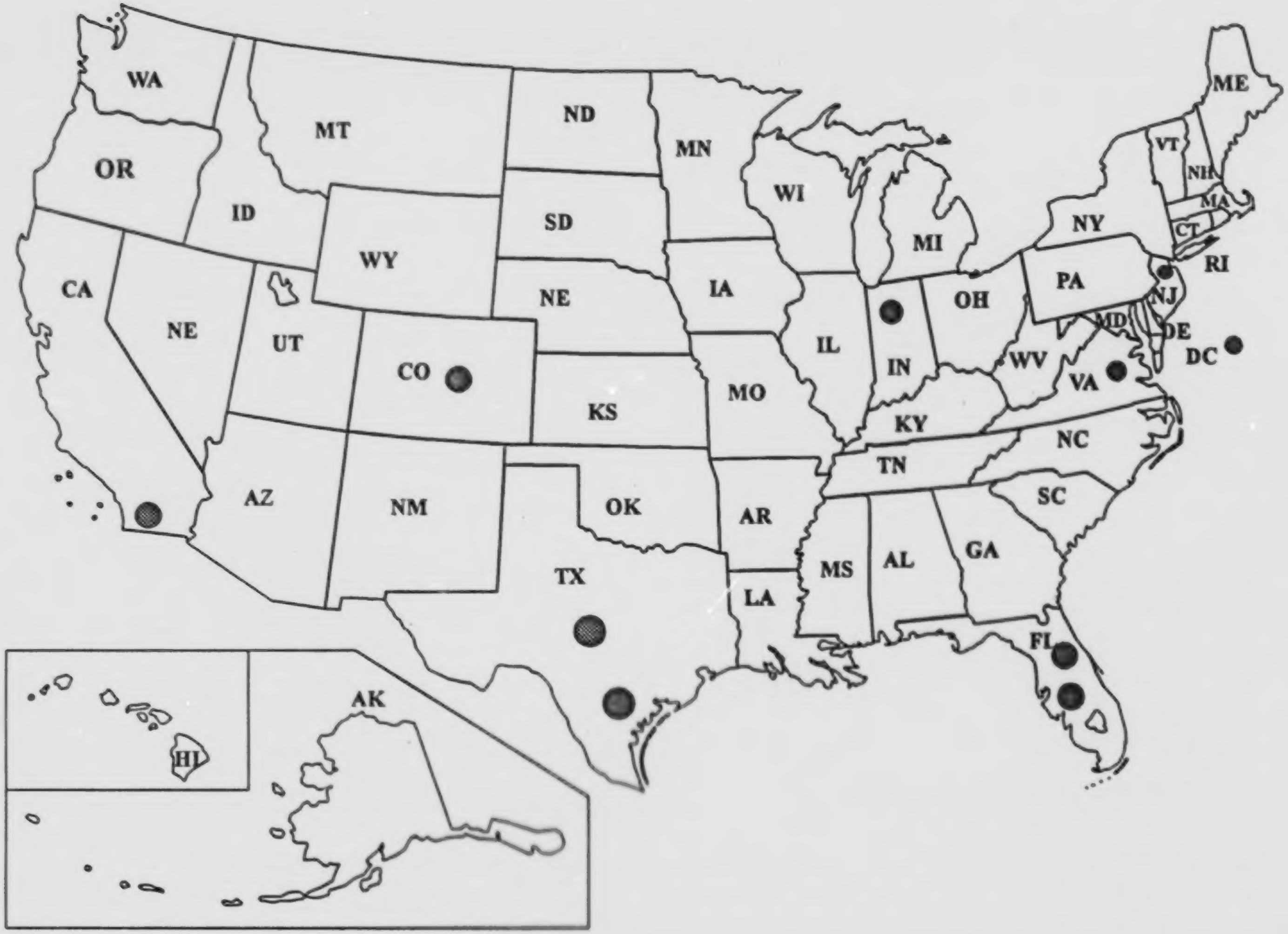
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Figure 1. - Location of Professional Development Activities

several other countries.

Ratings for the training activities were exceptionally positive. Using a 5-point Likert scale (5 indicating Excellent, and 1 indicating Poor) each workshop was evaluated on Content, Presentation, Support Materials and Transferability of Content to Work Setting. The average score was 4.2, with a standard deviation of ±.90. In addition, participants were asked several other questions, including questions regarding their role and position. As illustrated in Table 2, the majority of participants were administrators and teachers (both regular and special educators). Over 50% of respondents worked in a school which had fewer than 500 students. In addition, over half of the participants indicated that they worked with the elementary school children.

Frequently, attendees provided written comments to emphasize the rating given to a particular item on the evaluation form or to let us know what they thought of the training activity overall. Some of the comments included: *"Best workshop I ever attended!" "Trainers are excellent!" Informative and useful!" "Many good specific ideas." "Very useful! Energetic!" " Practical uses that we can take home and share!"* (A copy of the evaluation form is included in the Appendix B.)

As described under the Impact and Accomplishments section, the content of the modules was revised and updated regularly based on evaluations completed by workshop participants and on recent developments in the knowledge base and based on periodic review and assessment of the overall training curriculum.

OBJECTIVE 3: DISSEMINATE TRAINING RELATED INFORMATION

Information about the project, activities and products was disseminated in CEC mailings and through CEC publications such as *CEC Today*, *TEACHING Exceptional Children*, *Exceptional Children* and the announcements for CEC's annual convention. In the fall of 1993, CEC published a special issue of *Exceptional Children* on Issues in the Education of Children with Attention Deficit Disorder. The special issue sent to approximately 54,000 CEC members provided a comprehensive review of the knowledge regarding identification, assessment, and education of individuals with ADHD. Project staff and Content Committee members contributed a 2-page article about CEC's professional development project on ADHD. In addition to the initial distribution, copies of the special issue were provided to participants in all project sponsored training activities. A copy of the special issue is included in Appendix C.

In an effort to provide timely training opportunities to a wide audience that were affordable and of high-quality, the project developed a video and training manual based on the content of the modules. The video and manual evolved based on feedback received from workshop participants on the evaluation forms and comments from individuals inquiring about the availability of videotapes of the workshop. In an effort to maximize utilization of the training materials, the project developed a training package for use by staff developers and others involved in professional development at regional, state and local levels. Working closely with CEC's Professional Development and Publications Units, the project developed a thirty minute videotape to accompany the training manual. The video and manual have been developed to be used as a set; however, the video could be used alone to provide a general overview of key considerations when working with students with ADHD. Each module is presented in depth in the manual and highlighted on the video. Following each module in the manual, questions are presented that correspond to the content in the video and manual. These questions can be used to guide and facilitate discussion in a workshop format. Dissemination of this training product is occurring through CEC Publications Program, CEC's Website and the ERIC Clearinghouse on Disabilities and Gifted Education. Please refer to Appendix D for a copy of the CEC Publications Catalog and a piece distributed through the ERIC Clearinghouse which lists publications on the topic of ADHD available from CEC.

Future dissemination activities to be completed during the fall of 1996 include journal articles and a satellite telecast presentation. Information about the project will be included in a special issue of *Teacher Education and Special Education (TESE),* the journal of CEC's Teacher Education Division. The issue will focus on the thirteen federally funded personnel preparation projects on attention deficit/hyperactivity disorder. In November, 1996, the Project Director will participate in a satellite broadcast and a final Project Directors' meeting to disseminate the results of the thirteen projects. These dissemination activities will ensure the projects' continuing impact on furthering the knowledge in the field about attention deficit/hyperactivity disorder.

OBJECTIVE 4: MAINTAIN AN EFFECTIVE PROJECT MANAGEMENT SYSTEM

The project utilized a management system that included regular staff meetings, on-going communication and collaboration with the project's Content Committee, including regular periodic meetings, and monthly budget reports. The Project Director maintained regular contact with OSEP staff regarding progress of the project. In addition, the Project Director worked with other CEC units, programs, and selected CEC divisions to further the integration impact of the project's professional development activities.

APPENDIX A

A Continuing Education Program on

Attention Deficit/ Hyperactivity Disorder

Ron Reeve, Ph.D.
Judy Schrag, Ph.D.
Mary Spessard
Ron Walker, M.A.
Ann Welch, M.A., M.Ed.
James Wright, Ed.D.

The Council for Exceptional Children

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Mary Spessard

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EFFECTIVE CLASSROOM INTERVENTIONS III-1–24
Ron Walker and Ann Welch

Module IV

POLICY AND ADMINISTRATIVE ISSUES IV-1–15
Ron Reeve, Judy Schrag, and Ron Walker

PREFACE

In 1992, the Council for Exceptional Children (CEC) was awarded a grant by the Office of Special Education Programs (OSEP) of the U.S. Department of Education entitled *A Continuing Education Program on Attention Deficit/Hyperactivity Disorder.* The goal of the 3-year grant was to enhance the knowledge and skills of special and general educators to better serve children with attention deficits. The project developed four training modules that drew from CEC's Task Force on Attention Deficit Disorder, the synthesis efforts of the federally funded research centers, and other field research and practice-based initiatives.

This video and manual have evolved over the course of the project. They were developed to be used together; however, the video highlights key issues covered in the manual and could be used alone to provide a general overview of some of the issues related to children with attention deficit disorder. Following each module in the manual, questions are presented that correspond to the content in the video and manual. These questions can be used to guide and facilitate discussion in a workshop format.

Since the project's inception, the training content has been developed and revised by a content committee that included leaders in the four module topic areas. Because of their strong commitment to the project, these skilled professionals delivered the training as well. A variety of professional development activities were conducted over the course of the project, including full-day workshops, conference sessions, and conference strands. The content was revised and updated based on evaluations completed by workshop participants and recent developments in the knowledge base.

The modules and their authors are:

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Module III, *Effective Classroom Interventions*, focuses on specific classroom practices. Both Module II and Module III take the position that, in the large majority of cases, administrative, instructional, and management changes beneficial for students with ADHD are beneficial for everyone. When a teacher adds to his or her repertoire of skills to meet the needs of students with ADHD, those new skills can be used daily to benefit all students.

Module IV, *Policy and Administrative Issues*, covers the legal, administrative, and policy issues that are critical in designing and implementing appropriate programs for students with ADHD. The legal requirements for schools under the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973 (504), and the Americans with Disabilities Act of 1990 (ADA) are explained and compared.

CEC's federally funded project on attention deficit disorder, *A Continuing Education Program on Attention Deficit/Hyperactivity Disorder*, is proud to release this video and manual.

ACKNOWLEDGMENTS

Many individuals have made important contributions to the development of this manual and videotape for *A Continuing Education Program on Attention Deficit/Hyperactivity Disorder.*

First, we would like to extend our sincere appreciation to the members of the project's Content Committee for bringing their knowledge, experience, and expertise to this effort. Many thanks to Ron Reeve, Judy Schrag, Mary Spessard, Ron Walker, Ann Welch, and James Wright.

We also would like to express our sincere thanks to the CEC staff members who have participated in the project over the last 3 years: Elizabeth Kirmse, Betty McCracken, Ginger Katz, and Dawna Farrar. Their many contributions to the development of the manual and video, and to the coordination of professional development activities, have been invaluable.

Finally, a special thanks to our project officer, Angele Thomas, for her support and guidance over the course of the project.

Anmarie Kallas
Project Director

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MODULE I

A Continuing Education Program on

Attention Deficit/ Hyperactivity Disorder

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Many individuals have made important contributions to the development of this manual and videotape for *A Continuing Education Program on Attention Deficit/Hyperactivity Disorder.*

First, we would like to extend our sincere appreciation to the members of the project's Content Committee for bringing their knowledge, experience, and expertise to this effort. Many thanks to Ron Reeve, Judy Schrag, Mary Spessard, Ron Walker, Ann Welch, and James Wright.

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Anmarie Kallas
Project Director

CHARACTERISTICS AND IDENTIFICATION

Due to schools' recent focus on the topic of attention deficit/hyperactivity disorder (ADD/ADHD, hereafter abbreviated as ADHD), it would be logical to assume that ADHD is a new phenomenon challenging America's schools. Is ADHD a problem that has evolved only in the last decade or so?

No, in fact, children with ADHD have always been prominent members of our school population. This condition is among the most common disorders of childhood and adolescence—on average, one student with ADHD is present in every classroom in America. However, until 1991, this disorder was considered primarily a medical problem concerning mostly physicians and/or clinicians in mental health clinics and other nonschool settings. Our lack of formal recognition of this disorder in the educational setting contributed to the tragically frequent academic and social failure of students with ADHD. The cost of not recognizing and dealing appropriately with these students in the school environment eventually became too great; hence, the "new" disorder called ADHD has become a crucial topic for educational personnel from preschool through college level.

Review and Brief History of Attention Deficit/Hyperactivity Disorder (ADHD)

1863—"Fidgety Phil"—Dr. Heinrich Hoffman

In 1863 Dr. Heinrich Hoffman, a European physician, wrote of a baffling young patient about whom he was so concerned that he was moved to write poetry. His poem, in part, follows:

> Fidgety Phil, he won't sit still,
> He wiggles, he giggles,
> The naughty, restless child
> Grows still more rude and wild.

1902—"Defect in Moral Control"—Dr. Richard Still

A more formal description of what we now term ADHD was provided by Dr. Richard Still in 1902 in a series of lectures to the Royal College of Physicians in England. He described 20 children he had seen in his practice. He characterized them as excessively emotional, defiant, aggressive, and resistant to discipline. Most were also overly active and inattentive. Dr. Still suggested that their condition could be considered a "defect in moral control." A century ago the term "moral" related to the ability to determine right from wrong. Dr. Still saw these 20 children as able to differentiate right from wrong intellectually, but their "will" was unable to implement their moral judgment.

1920s—Post-Encephalitic Behavioral Disorder

In 1917 and 1918 an epidemic of encephalitis broke out in the United States. Many children who survived the infection of the brain were left with substantial cognitive and behavioral difficulties. Reports in the literature at this time related a syndrome of behavioral problems with this epidemic. These problems included impairments in attention, activity level, and impulse control, as well as memory and social problems. This syndrome, which includes behaviors that are strikingly close to our current description of ADHD-related behaviors, became known as "post-encephalitic behavioral disorder" (Barkley, 1990). The fact that brain pathology was acknowledged to have produced these behavioral outcomes was important in focusing the field's interest on the brain as the likely location of such problems.

1940s and 1950s—Brain Injury

Behavioral problems continued to be tracked to acquired brain pathology, whether from toxins, infections, birth trauma, or head injury. In 1941, Werner and Strauss studied mentally retarded children in the Wayne County Training Center near Detroit, Michigan. They divided the children into two groups: those with genetic causes for retardation (such as Down syndrome) and those who had acquired deficits due to birth traumas or later injuries to the brain. The men examined typical behaviors of the two groups and identified what they believed to be the syndrome resulting from the brain trauma. This "Strauss Syndrome" included distractibility, emotional instability, cognitive deficits, and hyperactivity. Hyperactivity, inattention, and impulsivity, which today are central to ADHD, were prominent in Werner and Strauss's description. Thus, children today who are diagnosed as having ADHD would have been considered brain injured during the 1940s and 1950s. It is important to note, however, that the early research on which this notion was based usually involved children with much more serious pathology than the typical child with ADHD today.

As educators and mental health professionals began to work with these "brain injured" children, they adopted the same assumptions that had arisen in the medical research. William Cruickshank (1961), for example, developed an elaborate teaching model for "brain injured, hyperactive" children in the 1950s. He and his colleagues selected and screened children who had been permanently excluded from school due to behavioral problems. They looked for behaviors such as hyperactivity, attention problems (including distractibility), and perceptual deficits. Based on the presence of these behaviors he and his colleagues diagnosed a group of these children as "brain injured." Cruickshank was not alone in assuming that the existence of these behaviors was proof that the children had suffered brain injury.

1950s and 1960s—Minimal Brain Damage (MBD)

During the 1950s and 1960s many professionals became concerned that the diagnosis of a medical disorder (brain damage) was being made only on the basis of behaviors. Often the children involved showed no physical symptoms. However, it was widely accepted at that time that acquired brain pathology was at the root of the observed behaviors. The "brain damage" was presumed to be too minor to be seen by current technology. "Brain injured" children were called "minimally brain damaged." During the 1960s the most common label for children with these behaviors was minimal brain dysfunction, or MBD.

1970s—Hyperactivity

Eventually, the term MBD began to fade in part due to criticism that the concept was vague and meaningless, without neurological support, and led to diagnostic over-inclusion. Schools tended to prefer terminology such as "dyslexia," "language disorder," and "learning disabilities" and started to focus on the academic problems many of these children experienced. In mental health clinics and similar settings the tendency was to describe formerly termed "MBD" children as hyperactive based on their most striking behaviorally observable characteristic—hyperactivity.

DSM and *DSM-II*

The Diagnostic and Statistical Manual of Mental Disorders (DSM), published and revised periodically by the American Psychiatric Association, serves as the bible for psychiatric nomenclature. It codifies terminology and diagnostic criteria for a wide range of disorders. It also reflects current best thinking about the etiology and nature of these disorders, and it influences the field quite substantially. *DSM-II* was published in 1968, and used the term "hyperkinetic reaction of childhood" to refer to the types of problems now called ADHD. At that time it was assumed that hyperactivity or hyperkinesis was a disorder of childhood and that once a child reached adolescence this problem went away, perhaps due to some type of neurochemical changes associated with puberty.

During the 1970s many clinicians and researchers began to view this problem as involving much more than motoric overactivity. They noted that some hyperactive children actually performed well academically and socially. At the same time, some children appeared inattentive but were not hyperactive at all. These inattentive children were not successful either in school or in social interactions. While it had been assumed that hyperactivity and inattention were invariably linked, case after case of exceptions to this rule appeared, eventually forcing a reconsideration of the very nature of the hyperactive child syndrome. Inattention and inability to inhibit responding proved more critical than hyperactivity to the negative outcomes experienced by these children.

1980—Attention Deficit Disorder (ADD)—*DSM-III*

Clinical terminology changed when clinicians understood that inattention was the more important element affecting the negative outcomes in this syndrome. *DSM-III*, published in 1980, used the term attention deficit disorder (ADD) in place of references to hyperactivity or hyperkinesis. In *DSM-III*, ADD was characterized as having two major subtypes: ADD with hyperactivity and ADD without hyperactivity. In addition, *DSM-III* recognized that problems associated with this disorder do not magically disappear at puberty.

1987—Attention Deficit/Hyperactivity Disorder (ADHD)—*DSM-III-R*

In the mid-1980s, when this revision was being prepared, the research support for the existence of a type of ADD without hyperactivity was not strong. This led to renaming the condition attention deficit/hyperactivity disorder (ADHD). ADD without hyperactivity was relegated to a residual category called undifferentiated attention deficit disorder, with a note that more research was necessary to determine if the category was valid.

1994—*DSM-IV*

Between 1987 and 1994 the research data necessary to document the existence of a subtype of attention deficit without hyperactivity emerged. Our current understanding of the disorder is that hyperactivity and impulsivity almost always occur together, and inattention is often part of the behavioral package. Some percentage of people with major deficits in attentional processes, including organization, initial focus, sustained attention, and susceptibility to distraction, do not show evidence of impulsivity and hyperactivity. It also appears that some individuals may be impulsive and hyperactive but do not have a significant impairment in their ability to attend. Thus, three major subtypes of ADHD are now recognized:

1. ADHD, predominantly hyperactive-impulsive type.
2. ADHD, predominantly inattentive type.
3. ADHD, combined type.

In *DSM-IV* terminology, the condition is referred to as attention deficit/hyperactivity disorder, just as it was in the previous version, despite the fact that hyperactivity is no longer a necessary part of the symptomatology. Apparently, the committee that revised the *DSM* believed that the need for historical continuity in the title of the disorder overrode the possible benefits of having a new name for the disorder that more clearly reflected the current understanding of the condition's nature. Our understanding of this disorder should be viewed as constantly evolving.

What ADHD Is and What It Is Not

Current Definitions of ADHD in *DSM-IV*

ADHD is a neurobiological, developmental disorder. Its essential feature is described as "...a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent than is typically observed in individuals at a comparable level of development" (American Psychiatric Association, 1994).

DSM-IV—Diagnostic Criteria

In order to make a diagnosis of ADHD the symptoms must meet the following criteria:

A. Either (1) or (2):

(1) Six of the following symptoms of **inattention** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

a. often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities

b. often has difficulty sustaining attention in tasks or play activities

c. often does not seem to listen when spoken to directly

d. often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)

e. often has difficulty organizing tasks and activities

f. often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)

g. often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)

h. is often easily distracted by extraneous stimuli

i. is often forgetful in daily activities

(2) Six (or more) of the following symptoms of **hyperactivity-impulsivity** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

a. often fidgets with hands or feet or squirms in seat

b. leaves seat in classroom or in other situations in which remaining seated is expected

   - c. often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
   - d. often has difficulty playing or engaging in leisure activities quietly
   - e. is often "on the go" or often acts as if "driven by a motor"
   - f. often talks excessively
   - g. often blurts out answers before questions have been completed
   - h. often has difficulty waiting turn
   - i. often interrupts or intrudes on others (e.g., butts into conversations or games)

B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7.

C. Some impairment from the symptoms is present in two or more situations (e.g., at school, work, home, social situations).

D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.

E. The symptoms are not better accounted for by another mental disorder (e.g., a mood disorder, anxiety disorder, dissociative disorder, or a personality disorder).

Subtypes of Attention Deficit/Hyperactivity Disorder

Although most individuals have symptoms of both inattention and hyperactivity-impulsivity, there are some individuals in whom one or the other pattern is predominant. The appropriate subtype (for a current diagnosis) should be indicated based on the predominant symptom pattern for the past 6 months.

314.00 Attention Deficit/Hyperactivity Disorder, Predominantly Inattentive Type

This subtype should be used if six (or more) symptoms of **inattention** (but fewer than six symptoms of hyperactivity-impulsivity) have persisted for at least 6 months.

314.01 Attention Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type

This subtype should be used if six (or more) symptoms of **hyperactivity-impulsivity** (but fewer than six symptoms of inattention) have persisted for at least 6 months. Inattention may often still be a significant clinical feature in such cases.

314.01 Attention Deficit/Hyperactivity Disorder, Combined Type

This subtype should be used if six (or more) symptoms of **inattention and** six (or more) symptoms of **hyperactivity- impulsivity** have persisted for at least 6 months.

Coding note: For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, *"In Partial Remission"* should be specified.

314.9 Attention Deficit/Hyperactivity Disorder Not Otherwise Specified
This category is for disorders with prominent symptoms of an attention deficit or hyperactivity-impulsivity that do not meet criteria for Attention Deficit/Hyperactivity Disorder (American Psychiatric Association, 1994).

ADHD typically involves age-inappropriate levels of inattention, impulsivity, and motoric activity, although the presence of hyperactivity is not seen in some individuals with the disorder. It is likely that more than one type of neurobiological problem underlies the various forms that the disorder takes. However, the fact of a biological basis for ADHD is no longer debatable.

In *DSM-III-R* and *DSM-IV*, a category referred to as "developmental disorders" exists. The disorders in this group are similar to one another in that they involve problems in the acquisition of cognitive, language, motor, and/or social skills. A good case could be made to include ADHD in this grouping as well, since it is a chronic developmental condition. Instead, ADHD is listed among the "disruptive behavior disorders," along with "oppositional defiant disorder" (ODD) and "conduct disorder" (CD), in *DSM-III-R*. In *DSM-IV* the category was renamed "attention deficit and disruptive behavior disorders" in recognition of the fact that not all individuals with ADHD are disruptive, nor do they all evolve from ADHD into patterns of disruptive behavior later. However, ADHD remains grouped with the behavior disorders, although it is a developmental disorder in many respects. It has a physiological cause and it interferes with the acquisition of skills, most commonly in the areas of social skills, fine motor coordination, and some academic skills. It is also typically present throughout a life span, although it manifests itself somewhat differently at various stages of development.

ADHD is a chronic developmental disorder, present in most cases from conception and continuing to impair functioning throughout life. The most difficult time of life for many individuals with ADHD is the school years because of the unique demands schools place on students—sit still, work on the same task for a long period of time, do what is scheduled rather than what interests you at the moment, and so on.

ADHD runs in families. If either parent has ADHD, the odds are about one in four that any child born into the family will be diagnosable as ADHD. Research with children from families with an ADHD parent who were adopted at birth into non-ADHD families provides strong evidence that ADHD is in fact an inherited, rather than a learned, disorder.

Boys are identified as having ADHD six to eight times more often than girls. This data comes from clinics that rely on referrals from schools or from parents. The disparity can be explained in part because of the different ways boys and girls manifest the symptoms of ADHD. Boys tend to be more aggressive, boisterous, and physical, perhaps because those behaviors are tolerated more often in young boys than in young girls, and because boys have more models for such externalizing behaviors than do girls. It appears that boys draw more attention to themselves than girls do and, as a result, may be referred at a different rate.

However, when researchers go into classrooms and objectively look for behaviors indicating ADHD without any preconceptions about who might have the disorder, the male to female ratio for ADHD is approximately two or three boys to one girl. With the ADHD without hyperactivity subtype, research suggests that the ratio may be nearly equal between males and females. The major difference is with hyperactivity/impulsivity, where boys clearly outnumber girls. It is believed that ADHD is passed from generation to generation on the father's side. A male born to parents either of whom has ADHD has about a one in three chance of having ADHD; a female is less likely to be affected, though perhaps one in six or seven will have the disorder.

It is estimated that 3 to 5 percent of all school-aged children have ADHD. The difference represents perhaps one million children in the United States who would be diagnosed using the 5 percent figure who would not be considered ADHD with the more conservative 3 percent figure. This range is testament to the imprecision in diagnosis. The situation is not atypical for a condition which is in the early years of its recognition. Similar variability exists with the diagnosis of specific learning disabilities and serious emotional disturbances. (American Psychiatric Association, 1994.)

Seriousness of the Disorder

Previously, ADHD was considered by many to be a relatively minor condition. (Barkley, Fisher, Edelbrock, & Smallish, 1990.) In the last several years, however, follow-up studies tracking children with ADHD into adulthood have provided a very different picture. There is no longer any question about the severely disabling nature of the condition. Follow-up studies indicate that when children with ADHD grow up, they experience major problems in adulthood. (Gittleman, Mannuzza, Shenker, & Bonagura, 1985.) Perhaps as many as two-thirds of them continue to experience symptoms throughout their lives, impairing their day-to-day functioning. Children identified as having ADHD by elementary school age are three times less likely to graduate from high school and eight times less likely to graduate from a 4-year college than their peers without the disorder. They are at least three times more likely than peers to experience their parents getting a divorce, providing further testimony to the strain on family relations caused by having a child with ADHD. They are three times more likely to have contact with the police, although many of the contacts are of the traffic offense variety.

Social problems persist, so that adults with ADHD are less likely to be in satisfying, intimate relationships, and more likely to move from one marriage to another if they do get married. They also have difficulty holding a job, and they often work at relatively menial jobs. Thus, they not only are undereducated for their intelligence level, but they are underemployed for their educational level. Only 11 percent are free of any level of psychiatric problems and function well. Ten percent attempt suicide. (Weiss & Hechtman, 1986, 1993.)

Although it is not clear why some children with ADHD function with no long-term difficulties, we can offer some informed speculation. For instance, once free of the great burden that formal schooling places on them, adults with ADHD can choose how to spend their time. They may wisely select career options that do not require them to function under constraints such as those forced upon them in schools. Another explanation for a lack of continued problems into adulthood among some people with ADHD is that their physiological systems may have matured out of the condition during their developmental years. We all know individuals who were still growing taller in their late teens and even early twenties. Likewise, neurophysiological changes may occur later for some people than for others.

Another reason why not all children with ADHD grow up to be adults with ADHD may be that, as children, they experienced favorable environments well matched to their needs. They may have received appropriate interventions that allowed them to develop to the point where they could enter adulthood aware of their condition and fully able to cope with the challenges. We hope this will be a more common scenario as ADHD becomes better known and understood, as schools provide the necessary adaptations to make the educational environment a better match for the needs of such children, as medical management becomes less hit or miss, and as persons with ADHD begin to feel better about their competencies as well as their problems.

Differential Diagnosis

How is the diagnosis of ADHD made?

The diagnosis of ADHD is among the most difficult in all of childhood psychopathology. There are several reasons for this. While the condition has a neurophysiological basis, no medical tests are currently available that differentiate children with ADHD from children and adults without ADHD. We are forced to rely primarily on the resulting behaviors as data sources.

Another problem that confuses the diagnostic process results from a misconception about the nature of ADHD. The act of making a diagnosis implies deciding whether or not a condition exists within an individual. This type of thinking is appropriate for most medical problems. However, the situation with ADHD is different. Attention, impulsivity, and hyperactivity are not simply present or absent. Rather, each occurs on a continuum. Within an individual who has difficulty in one or more of these behavioral areas, the efficiency of these attentional processes varies from situation to situation, from day to day, even from moment to moment. Because this disorder is not a clear-cut issue, it follows that one professional's criteria for making a diagnosis for ADHD can be substantially different from another professional's.

Differential diagnosis

A third complicating problem in appropriately identifying children and adults with ADHD is that observable behaviors are the data sources for the diagnosis. The list of behaviors specified in formal definitions of ADHD (such as those listed in the *DSM*) must be present to qualify an individual for the diagnosis. However, these same behaviors occur in people who do not have ADHD. A child who is impulsive or inattentive may be behaving that way because of other problems. Therefore, the behaviors must be seen as necessary but not sufficient for the diagnosis of ADHD. Competing possibilities that may explain the behaviors have to be given equal consideration. This is the issue of *differential diagnosis.*

What else looks like ADHD, but is not?

What else can mask as ADHD? Unfortunately, many conditions share symptoms. For example, children from chaotic home environments typically show up for school unprepared for the structure and routine of kindergarten or first grade. For many children, school is the first setting in which they are expected to sit in a designated place for an extended time and engage in activities not of their own choosing. Placed in school, such children fidget, fail to follow instructions, don't finish tasks, move around the room, intrude on others, and so on. If the only basis for making a diagnosis of ADHD was the list of behaviors detailed in the

DSM, most children from chaotic homes would be mislabeled. The "rule out" part of the diagnostic process for ADHD—that is, making the differential diagnosis—requires systematically considering what else might explain the observed behaviors. The process follows an imprecise but logical path.

A variety of physical problems can lead to behaviors similar to those of children with ADHD. Among them is poor nutrition. Some students go to school hungry; some have not eaten since the free lunch at school the previous day. Their behaviors can fit the profile of children with ADHD. However, some peanut butter, bread, and milk, along with a small dose of nurturance, can sometimes "cure" them. Thus, they are not truly children with ADHD.

Children with hearing deficits share many behaviors with children with ADHD. It is difficult for a child who cannot hear directions to follow them. It makes good sense to be sure that children who appear inattentive have adequate auditory acuity.

Some medications for chronic medical conditions have side effects that include difficulties with attention and concentration. The most common of these medications are allergy and asthma drugs (e.g., theopheline). Thus, determining whether or not a child who shows ADHD symptoms is taking medication is an important step in differential diagnosis.

Psychological problems such as depression can also mask as ADHD. How should a differential diagnostic process be conducted for depression? First, since ADHD is considered to be a lifelong condition, and depression is usually more transient, indications of change in mood and behavior may suggest a psychological basis for the attention problems. Depression may be linked to some event (such as a loss or other trauma) in the life of the child. The period immediately preceding the mood change is a likely time frame to probe for possible precipitating events.

These are only a few of the possible competing diagnoses for ADHD, but the point should be clear. Many other conditions share symptoms with ADHD; a good evaluation takes great care to make a differential diagnosis to rule out other reasonable explanations for the observed behaviors.

Comorbidity

Another major complication in the diagnostic process for ADHD is that it frequently co-occurs with other problems. It is possible to have ADHD and to have other conditions as well. This is known as *comorbidity*. Although this is a simplistic notion it is important to note—ADHD may be present along with any other condition. Therefore, just because a person has one diagnosed problem does not mean that ADHD should not be considered as a comorbid condition. Some conditions, such as oppositional defiant disorder, are more likely than others to be comorbid with ADHD.

The largest overlap in comorbidity with ADHD is learning disabilities (LD). Until a few years ago, many advocates for children with ADHD argued that all children with ADHD were learning disabled, and therefore, entitled to special education services under the Individual's with Disabilities Education Act (IDEA), formerly called Public Law 94-142 (the Education for All Handicapped Children Act). The rationale offered by these advocates has both logical and historical bases. When P.L. 94-142 was passed in 1975, the law incorporated the following phrase as its definition of LD: "A learning disability means a disorder in one or more of the basic psychological processes involved in understanding and using language, written or spoken..." (*Federal Register*, 42, 1977, p. 65083). The idea of a disorder in psychological processing is central to the understanding of LD. Learning disabilities are conceptualized as resulting from a problem with the processing of information by the brain. The basic psychological processes include attention, perception, (visual, auditory, and tactile), and short- and long-term memory, along with various information retrieval processes. It follows then, that if a learning disability means a "disorder in one or more of the basic psychological processes," and if attention is one of the basic psychological processes, and if one has ADD, then that person could also be considered LD. The logic of this argument is convincing.

The official IDEA definition of LD includes the sentence, "The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia." As stated earlier, ADHD was at various times in history considered to be a "brain injury" and "minimal brain dysfunction." Learning disabilities and ADHD share this common parentage. A logical and historical basis does exist for saying that all children with ADHD are also learning disabled. However, regardless of whether that argument makes conceptual sense, the practical reality is that most children with ADHD will not receive special education services as LD. When the *Rules and Regulations* to implement P.L. 94-142 were being developed, the Department of Education adopted language to clarify the procedures for determining LD. Included was the important concept of the necessity for a documented severe discrepancy between aptitude and achievement. While the majority of children with ADHD do poorly in school in areas such as getting work done, and receive low grades as a result, the typical student with ADHD does fairly well in one-to-one testing. As a result, students with ADHD, even those with failing grades, often do not have the requisite aptitude/achievement discrepancy required for LD service provision in schools.

The other major special education classification that overlaps substantially with ADHD is *seriously emotionally disturbed* (SED). Depending on the study, estimates for incidence of attention deficits among identified SED students range from about 30% to 65% (Loney, 1987; Pelham & Murphy, 1986). It can be argued that students who have serious emotional problems have difficulty paying attention because of their emotional difficulties. However, a good case can be made for the opposite perspective in which attention deficits lead to emotional problems. Retrospective reports of parents often include descriptions of children with ADHD as being temperamentally difficult from birth, and even before. Many mothers describe their children with ADHD as having been different from their other children even in utero. The current theory is that many children with ADHD were difficult from conception, and that their excessive prenatal activity levels and more frequent traumatic deliveries were the *result* rather than the *cause* of these difficulties.

As a group, children with ADHD are strikingly unpopular with peers. They also tend to be poorly coordinated so that mastery of highly visible developmental tasks such as riding a bike and writing one's name neatly do not occur on time. As children with ADHD become old enough to realize their low social status and their comparatively poor performance, their self-esteem is severely damaged. This combination of difficult temperament, infrequent success at mastering developmental tasks, and rejection from peers put children with ADHD at considerable risk of developing serious emotional problems as they get older.

Regarding other types of disabilities served through special education programs in schools, such as mental retardation, visual and hearing impairments, and other exceptionalities, no substantial overlap exists with ADHD. However, students with these problems are at least as likely as other children to also have attention deficits.

A category of disability called *other health impaired* (OHI) is included under IDEA. It covers students with a variety of chronic or acute physical conditions such as tuberculosis, diabetes, asthma, and lead poisoning which may hinder their functioning in school because they result in "...limited strength, vitality, or alertness...." The Virginia Task Force Report, *Attention Deficit/Hyperactivity Disorder and the Schools* (1990), included the recommendation that children with ADHD should be served in the OHI category when their condition was interfering significantly with their school functioning. That recommendation became federal policy in 1991 with the issuance of the *Clarification Memo* by the U.S. government. The memo made clear that children with ADHD, even if they had no other disability, could be considered for service delivery under IDEA (as OHI) as well as under Section 504 of the Rehabilitation Act of 1973.

Following are components to disorders frequently co-occurring with ADHD, as defined by *DSM- IV* (American Psychiatric Association, 1994):

Learning Disabilities (LD)

Special education definition "...a disorder in one or more of the basic psychological processes involved in understanding or in using language...."

Diagnostic criteria for 312.8 Conduct Disorder (CD)

A. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months.

Aggression to people and animals

(1) often bullies, threatens, or intimidates others

(2) often initiates physical fights

(3) has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun)

(4) has been physically cruel to people

(5) has been physically cruel to animals

(6) has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery)

(7) has forced someone into sexual activity

Destruction of property

(8) has deliberately engaged in fire setting with the intention of causing serious damage

(9) has deliberately destroyed others' property (other than by fire setting)

Deceitfulness or theft

(10) has broken into someone else's house, building, or car

(11) often lies to obtain goods or favors or to avoid obligations (i.e., "cons" others)

(12) has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering; forgery)

Serious violations of rules

(13) often stays out at night despite parental prohibitions, beginning before age 13 years

(14) has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period)

(15) is often truant from school, beginning before age 13 years

B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.

C. If the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

Diagnostic criteria for 313.81 Oppositional Defiant Disorder (ODD)

A. A pattern of negativistic, hostile, and defiant behavior lasting at least 6 months, during which four (or more) of the following are present:

(1) often loses temper

(2) often argues with adults

(3) often actively defies or refuses to comply with adults' requests or rules

(4) often deliberately annoys people

(5) often blames others for his or her mistakes or misbehavior

(6) is often touchy or easily annoyed by others

(7) is often angry and resentful

(8) is often spiteful or vindictive

Note: Consider a criterion met only if the behavior occurs more frequently than is typically observed in individuals of comparable age and developmental level.

B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.

C. The behaviors do not occur exclusively during the course of a Psychotic or Mood Disorder.

D. Criteria are not met for Conduct Disorder, and, if the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

Serious Emotional Disturbance (SED)

Special education definition: "...a condition exhibiting one or more of the following characteristics *over a long period of time and to a marked extent, which adversely affects educational performance:*

(1) an inability to learn which cannot be explained by intellectual, sensory, or health factors

(2) an inability to build or maintain satisfactory relationships with peers and teachers

(3) inappropriate types of behavior or feelings under normal circumstances

(4) a tendency to develop physical symptoms or fears associated with personal or school problems

...does not include children who are socially maladjusted unless it is determined that they are seriously emotionally disturbed" (*Federal Register, 42*, 1977, p. 42478).

Principles for Good Assessment

Until the *Clarification Memo* issued in 1991, ADHD was seen primarily as a medical/psychiatric diagnosis. The label generally was given by a physician or psychologist, utilizing whatever type of procedure that professional deemed appropriate. Not uncommonly, the diagnosis was given based on a 20-minute office visit, relying on data provided only by parents. It is now clear that school personnel must become involved in the assessment of ADHD, and that the diagnosis is likely to be made much more commonly by eligibility committees in schools than by professionals external to the schools. A physician does not have to be involved in making the diagnosis of ADHD for school purposes.

There is little consistency among professionals in the way the assessment for ADHD is conducted. However, it is possible to specify principles and procedures that should be followed in order to assure that the best diagnostic decisions will be reached, whether by school-based or external professionals. These "best practices" should include the following:

Use multiple sources of information. In addition to direct assessment of the referred student, it is important to get information from parents, teachers, and others in the child's environment. In the ideal situation these sources will concur. However, that often is not the case. Task demands may be substantially different in school versus the home. Prior to school entry some children never were required to sit quietly for an extended period of time and perform tasks chosen for them by someone else. In such a situation, school personnel may see a problem that does not exist at home. In addition, parents may not have a clear notion of how age-appropriate or inappropriate their child's behavior is.

In general, teachers tend to be more objective sources of information because they have a built-in norm group in front of them every day. However, teachers may be subject to a variety of biases.

Referred children may or may not be a good source of information. It is worth asking them about their understanding of their ability to pay attention and get their work done. When such information can be obtained, it often provides valuable insight into the nature and severity of the problems as experienced by these children.

Get information about functioning in different settings. We now know that behavior of children with ADHD is quite variable, from hour to hour and from situation to situation. In free play activities where a child picks the type of play, the behavior of children with ADHD as a group is indistinguishable from other children. Likewise, in simple task situations or if frequent reinforcement or novelty is involved, many children with ADHD do fine. They usually excel at video games, where there is novelty and frequent reinforcement. Other situations that involve novelty and frequent reinforcement include visits to the physician's and the psychologist's office. Children with ADHD perform surprisingly well when taking psychological tests given one-to-one by a well-trained attentive psychologist who frequently dispenses positive reinforcement.

In order to determine how pervasive the referred student's difficulties may be, a good assessment evaluates functioning:

- at home and school
- during the morning and the afternoon
- in structured and unstructured situations
- in group and individual activities
- across different types of academic subjects.

The one set of circumstances in which all children with ADHD show deficits in functioning has the following characteristics:

- the task is relatively difficult for the student
- the task requires sustained performance; it requires more than a few minutes to complete
- the student must work with little or no direct one-to-one supervision.

The most obvious setting with these characteristics is individual seatwork in a classroom. Evaluation of a child during this type of activity should always be included as part of the assessment.

Assess the multiple dimensions of ADHD. ADHD includes problems of inattention, impulsivity, and hyperactivity. It refers to a diverse combination of symptoms that includes only a few core features. Any two students appropriately diagnosed as ADHD may be quite dissimilar in the attention-related problems they exhibit. ADHD is really an undetermined number of related but varying conditions. It is important to look broadly at a referred student's particular set of problems, and not to define attention or impulsivity too narrowly.

The construct of attention is particularly complex. The major subtypes of attention include initial focus, sustained attention, selective attention, and avoidance of distractions. Each one of us is surrounded with a complex array of stimuli to which our attention could potentially be drawn. Typically, as we mature we are increasingly able to sort through this array and focus on the most important stimulus. However, some children are deficient in this sorting ability. Teachers must repeat instructions individually to such children, even though the same task directions were given to the whole class just moments before. Once pointed in the right direction, some of these children can work effectively.

Other individuals have little trouble with focusing attention, but they have no "staying power" (sustained attention). After a few moments of appropriate work, such children drift off or are pulled off task. The teacher must reorient and restart the child every few minutes.

Another more complex type of attentional difficulty involves selective attention. In this case the child's memory is not the problem, the problem is that the child pays attention to the wrong information. John Hagan (1967), a developmental psychologist, developed a task that has been used to research selective attention. The "Hagan Task" consists of a series of cards containing drawings of common household objects such as a bed, chair, table, or stove. These drawings are positioned in the center of the card. Placed in the corner of the cards, and drawn smaller, are pictures of animals, such as a cat, dog, or cow. The child is shown sample cards and is told to remember as many of the household objects as possible. The cards are then exposed, one at a time, for 5 seconds. The child is then asked to recall as many objects as he or she can. Afterwards, the examiner says, "I didn't mention this before, but you may have noticed something else on the cards. What do you remember about those things?" In a series of studies using this task, results revealed that nondisabled children remembered more household objects than did children who had a learning disability who also could have been diagnosed with attention deficit/hyperactivity disorder—a finding that surprised no one. However, when asked the follow-up question, the children with LD/ADHD actually remembered more of the animals than did their peer counterparts. The total number of items remembered, summing those which were supposed to be recalled and the "incidental" information, was the same for both groups. Thus, the memory of the children with LD/ADHD was not the problem. They did sustain their attention or they would not have been able to remember as much as they did. However, they were paying attention to the wrong information.

A fourth subtype of attention problem some children may experience is with avoidance of distractions. In their work with "brain injured" children in the 1940s, Werner and Strauss (1941) viewed distractibility as a primary attentional difficulty. In their view, these children's attention was drawn like a magnet to stimuli in their environments. There are some indications that children with ADHD are more susceptible to external distractors, although the evidence is mixed. It appears just as likely that such "distractibility" is secondary to the weak intensity of focus that children with ADHD have, or maybe to the children's search for clues about what it is they are supposed to be doing.

Many children with ADHD need no external distraction in order to be pulled off task; they are able to distract themselves with their own internal thoughts, even in a distraction-free environment. Their minds bounce or race from thought to thought, and their attention is directed here, there, and somewhere else. These internal distractions are at least as important in diverting attention as are the "extraneous stimuli" to which Strauss and Werner referred. The ability to avoid distractions, internal or external, is part of successfully paying attention, and that ability appears deficient in many children with ADHD.

Get multiple types of data. A comprehensive evaluation for ADHD should include information from interviews, observations, rating scales, psychoeducational measures, and specific tests of attention, impulsivity, and activity level.

Interviews: Most evaluations begin with a thorough developmental history from parents. The goal of the interview includes getting information about early indicators of possible attention problems (to aid in differential diagnosis), learning about any family history of the disorder, getting a sense of how the home is organized, and what expectations exist for the child's behavior, and determining what resources exist within the family to assist in interventions if the diagnosis is made.

Interview information should also be obtained from the child's teachers. Teachers can provide indications of the severity of the child's problems in comparison to other students in the same class, the situations in which the behaviors seem to occur most frequently, and the extent to which the problems are interfering with the academic productivity and/or social acceptability of the student.

A good interview should include questions tapping *DSM* criteria for diagnosing ADHD.

Observations: Observations of the child's behavior in the school environment can provide the most direct evidence of the presence or absence of ADHD symptoms. For many reasons, classroom-based observations are more direct, objective, nonreactive indicators of a child's behavior than any other measures currently available for diagnosing ADHD.

Generally, the child should be seen in two different settings—for example, doing individual seatwork and participating in group work, or participating in reading and in math. Target behaviors that can be observed and counted should then be specified in objective terms. For example, "paying attention" or being "on task" during seatwork could be defined as "looking at the materials and appearing to be engaged." Types of "off-task" behaviors might be defined as "looking around the room," "being out of seat," and "talking and touching peers." A separate code for each type of off-task behavior might be used. A simple but useful procedure would be to observe for some preset interval, for example, 10 seconds, while using a stopwatch or wearing earphones and listening to a prerecorded beep on a tape that sounds every 10 seconds. At the end of the interval the observer would record on a coding sheet whether the student had been on task for the entire interval or, if not, what type of off-task behavior was observed.

When setting up a structured observation it is important to determine how unusual the target child's behavior is compared to the typical child's behavior in the classroom. One way to accomplish this is to ask the teacher to nominate a same-sex peer or two who are "average" for the class. The observer can then alternate between observing the target child and a typical child, spending the first time block watching the target child, the next looking at the comparison child, then back to the target child, and so on.

Observations yield considerable useful data. For example, if 10 second time blocks are used, a 25 minute observation would provide 150 instances of behavior—75 for the target child and 75 for the comparison child or children. A percentage of time on-task is then computed simply by dividing 75 into the number of on-task behaviors coded. The variety of off-task behaviors coded often provides interesting information about the nature of the child's activities when he or she is not paying attention.

The observational data help in the diagnostic process. Knowing how different the referred child's actual classroom behavior is from peers' behavior provides objective information about the extent to which attentional difficulties are interfering with school functioning. Perhaps equally important, however, is the potential usefulness of such data in evaluating the success of interventions. When an intervention is attempted, the proof of success is when a child's attention in similar situations is improved. Repeating the observation and comparing pre- and post-intervention levels of on-task behavior allows a direct assessment of efficacy of the intervention, whether it is a behavior modification program, medication, or other intervention.

Among the more sophisticated classroom observation procedures which have been used for ADHD assessment are the Classroom Observation System (Whalen et al., 1978) and the Revised Stony Brook Observation Code (Abikoff, Gittelman-Klein, & Klein, 1977).

Rating Scales: The most popular and the most researched method of assessing children's ADHD-like behaviors is the use of rating scales. Generally, rating scales are made up of a list of behaviors. A rater who is familiar with the child simply states whether or not the child engages in the behavior by checking or circling "yes" or "no." Some rating scales have three-, four-, or five-point ranges to allow the rater to indicate the frequency or intensity of the behaviors.

Most rating scales have parent and teacher forms. Thus, by having a child's parents and teachers each fill out a scale, a composite picture of the child's behavior as seen by multiple respondents across multiple settings can be obtained. It is not uncommon for raters to disagree with one another—that does not necessarily mean that one rater is accurate and the other is inaccurate. When parents disagree, it may be because the father and mother observe the child in different circumstances, or because the father and mother elicit certain behaviors from the child. As a group, we know that children with ADHD behave better for their fathers than for their mothers. (Barkley, 1990.) Thus, an objective rating by fathers would be expected to be more positive than by mothers. One teacher may see and, therefore, rate different behaviors from those seen by another teacher. The variance across situations at school could be due to such factors as the child's preference for one subject over another, the time of day when the teacher observes the child, or the different degree of structure in one class versus another. Such information can help highlight situations in which the child's behavior is relatively good or bad, and perhaps offer clues to assist in designing interventions.

Rating scales may either be "broad-spectrum" instruments, to be used with students during the assessment/diagnosis process, or they may be specifically designed to pinpoint attention-related problems. They are also useful in initial screening contexts and after the diagnosis in evaluating the effectiveness of interventions. Among the most used broad-band instruments are the Child Behavior Checklist (CBCL) and Teacher Report Form (TRF) (Achenbach, 1991); the Conners' Parent and Teacher Rating Scales (Conners, 1989); and the Revised Behavior Problem Checklist (Quay & Peterson, 1983). The Behavior Assessment System for Children (Reynolds & Kamphaus, 1993) also shows promise of providing excellent broad-based information about children's functioning. More narrowly focused attention rating scales include the ADD-H Comprehensive Teacher Rating Scale (ACTeRS) (Ulmann, Sleator, & Sprague, 1988); the Attention Deficit Disorders Evaluation Scale (ADDES) (McCarney, 1990); and the ADHD Rating Scale (DuPaul, 1991). Reliability and validity of rating scales are relatively high compared to other assessment techniques, but it is important to be aware that over-reliance on one type of assessment technique is poor practice. Rating scales are indirect measures, relying on third parties' perspectives. Biases are always possible when the data are filtered through the eyes of others. Rating scales have weaknesses and, therefore, must be only one of several sources of information considered in a comprehensive evaluation.

Psychoeducational tests: In most schools and clinics a standard practice in cases involving educationally related referrals is to complete a battery of cognitive, perceptual, and educational tests, often accompanied by personality assessment instruments of some type. There are good reasons for including psychoeducational assessment procedures as part of a comprehensive evaluation with a child referred for possible ADHD. Comprehensive assessment must consider other educationally relevant information and alternative explanations for the difficulties being experienced by the referred child. Some information from routinely used tests potentially can support the diagnosis of ADHD.

A difficulty experienced by many students with ADHD is with rapid, efficient performance of tasks. This is especially true with ADHD without hyperactivity (ADHD, Predominately Inattentive Type in *DSM-IV*). These students seem to think and move slowly, as if in a fog. Several subtests on commonly used measures of cognitive ability require rapid cognitive processing. The Coding and Symbol Search subtests on the WISC-III require little intellectual power; they primarily measure speed of information processing. Low scores on these two subtests have been reported for groups of children diagnosed as ADHD. Similar subtests are part of the WJTCA-R (Visual Matching and Cross Out). The adult form of the Weschler scales (WAIS-R) has a subtest called Digit Symbol that is essentially the same as the Coding subtest from the WISC-III.

While data from standard psychoeducational instruments can support an ADHD diagnosis, there is no clear evidence to warrant using results from these instruments as primary indicators of ADHD. Other problems may produce similar patterns. Among them are anxiety and poor auditory processing skills. Likewise, the absence of indicators of attention and impulsivity on psychoeducational tests should not be interpreted as proof that ADHD is not present. These tests are given one-to-one in nondistracting environments. Some children who clearly have serious attentional problems are able to function perfectly well when taking tests in such a setting.

Specific tests of attention-related problems: Among the types of tasks that seem best able to tap into the problems shown by students with ADHD are the *continuous performance tests*, or CPTs. The subject is asked to attend to a task that requires focused and sustained attention for an extended period of time. The best known such task was developed by Michael Gordon, and is part of the Gordon Diagnostic System (GDS). The tasks are quite challenging and are sensitive to ADHD symptoms. Other attention-related measures include the Test of Variables of Attention (TOVA), the Trail Making Test, the Wisconsin Card Sort, and the Seashort Rhythm Test. A popular measure of impulsivity is the Matching Familiar Figure Test (MFF), developed by Jerome Kagan to assess what was thought to be a basic dimension of cognitive style.

Although many of these tools are used effectively in helping to support an ADHD diagnosis, nothing can replace clinical experience to allow results obtained by individual students to be placed in the broader context of how other similar students have functioned. The objective information based on norms must be tempered or enhanced based on qualitative features of performance and other sources of input. Some degree of "test of time" must take place prior to excessive reliance on these measures.

Characteristics and Identification of ADHD: Multicultural Considerations

> *...we should celebrate the differences among our populations, regard these differences as positive resources, and continue to explore our similarities. This is the foundation of all education within this American multicultural society. The effects of such pedagogy might be that individuals become more competent in their relations with others and that the concept of equity becomes more germane in our interactions (Elba Reyes, 1995).*

Recent issues in education have focused on the challenges faced by educators concerning culturally diverse children, their placement, instructional programs, and learning styles. A significant number of these children have been diagnosed as having attention deficit/hyperactivity disorder (ADHD) which has increased educational challenges presented to both general and special educators. Additionally, children who are culturally diverse and diagnosed with ADHD present a unique challenge for educators. Failure to address the special needs of students with ADHD from culturally diverse backgrounds can have an adverse effect upon the educational achievements of these students. Educators must develop and implement innovative and diverse instructional strategies that address the cultural factors, language characteristics, and cognitive styles of culturally diverse students with ADHD.

Programmatic adjustments can serve to reduce the incidence of misidentification and misdiagnosis of children from culturally diverse backgrounds. However, very few school systems currently provide specific educational services for children with ADHD (Professional Group for ADD and Related Disorders, 1991), and they are not making programmatic adjustments for those students who represent culturally diverse backgrounds. Those who do, realize that the combination of ADHD and the problems exhibited by cultural minorities create serious concerns regarding educational performance. They agree that new education strategies for multicultural students with ADHD must be implemented.

Administrators and teachers must be aware of the diverse cultures in their schools and classes before they can address the issues (Ford, 1992). Many educators have not given priority to investigating cultural values, interests, views, customs, and behaviors, and their relationship to instructional strategies in teaching the multicultural student with ADHD. Thus, in order to adequately address the issue of ADHD in our multicultural society, which will soon be our majority society, we must attend to, plan for, and implement instructional strategies and programs to meet these growing needs. Before proceeding, educators must study and become familiar with the differences in cultures to effectively respond to the needs of these students. Increased understanding of cultural differences will eliminate the incidence of both intentional and unintentional discriminatory practices (Wright, 1994).

Consider the following statistics:

- By the year 2000 the population of the U.S. will reach approximately 260 million. One of every three people will be Black, Hispanic, or Asian-American (Yates, as cited in Ortiz and Ramirez, 1988).

- Although America's youth population will decline rapidly after the year 2000, the non- white component will increase dramatically, from 30% in 1990 to 38% in 2010 (Hodgkinson, 1991).
- There will be 22 million Spanish-speaking people by the year 2000 (Macias, as cited by Yates in Ortiz and Ramirez, 1988).

Since 1990, a number of research training projects were funded to investigate the issue of ADHD. These projects varied in focus, and included work in the areas of identification, assessment and diagnosis, educational interventions, and promising practices. According to Wright (1992), the fact that issues related to cultural diversity were not addressed in the research emphasizes the need for federal, state, and local education agencies to consider these issues in their reform plans, perceptions, curricula, and higher education preparation programs.

Multicultural Considerations in Special Education

While most children with ADHD are educated within the regular classroom, some students may be eligible for special education services under the provisions of IDEA as "Other Health Impaired" or for other co-occurring disabilities (see Module IV). There are several issues unique to children from multicultural populations that should be considered prior to referral and placement in the special education system.

American public schools have traditionally used a monolithic model of instruction in which the organization of teaching, learning, and performance is compatible with the social structure of the dominant culture (Tharp, 1989). According to Tharp, teachers tend to expect that all students will develop learning patterns, skills, concepts, and cognitive functions based on traditional methods. While this is true for some students, instruction for students with ADHD, especially those from culturally different backgrounds, requires much more in terms of programmatic adjustments.

Social, cultural, psychological, and behavioral factors all influence achievement among children. Minority students are subject to unique cultural influences that are often at variance with the majority white population, influencing their achievement in a majority-dominated society.

> Since the majority of educators are, in fact, Anglo, monolingual speakers of English, and the composition of the teaching force will not change as rapidly as the ethnic and language composition of the students to be served, there are clear implications for continuing education or inservice training. . . . Appropriate training will produce understanding of the educational and learning implications of cultural, language, ethnicity, and learning style differences in the emerging student population (Yates, in Ortiz & Ramirez, 1988).

In recent years, much has been written concerning the effect of culture and language on learning (Banks, 1981; Boykin, 1982; Hale-Benson, 1986; Hilliard, 1989; Piestrup, 1973; Tharp, 1989; Villegas, 1991). The emerging issues of ethnicity, minority status, bilingual education, second language acquisition, and socioeconomic status have not been previously considered as relevant to the needs and concerns of special education. Research has shown that most of the instructional planning and activities conducted by special education teachers is still based on the traditional model of instruction, with little consideration given to students' cultural and linguistic background (Almanza & Mosley, 1980; Clark-Johnson, 1988; Cummins, 1984). As educators, we can no longer afford to ignore the impact that culture and language have on a learner's cognitive style and must seek new approaches to meet the students' learning needs. Multicultural behaviors are different, but can be perceived as deviant, leading to misdiagnoses and improper placement in special education programs (Harry, 1992).

Overrepresentation and Underrepresentation of Minorities

Historically, the issue of overrepresentation and underrepresentation of minority students in special education has been a problem. The issues of overrepresentation in special education were investigated by Helder and Reschly in the early 1970s and 1980s (Harry, 1992). Finn (1982) profiled data on a state-by-state basis to validate how minority populations are represented in special education.

Overrepresentation and underrepresentation are frequently used terms to indicate disproportionate representation: the percentage of minority students in a special educational program is larger (overrepresentation) or smaller (underrepresentation) than the percentage of that group in the educational system as a whole. The concept of disproportion refers to relative, not absolute numbers (Harry, 1992).

The issue of overrepresentation and underrepresentation of minority groups might be best addressed by defining minority groups. According to *Webster's Encyclopedic Unabridged Dictionary of the English Language,* (1989), a minority is defined as "a group differing, esp. in race, religion, or ethnic background, from the majority of a population, esp. when the difference is obvious and causes or is likely to cause members to be treated unfairly."

The *Thesaurus of ERIC Descriptors* (1994) defines a minority group as "subgroups within a larger society that are distinguished from the majority and each other, by race, national heritage, or sometimes by religious or cultural affiliation. Minority groups also have the connotation of being objects of prejudice or discrimination."

Brantlinger and Guskin (1985), refer to minorities as having the following characteristics:

1. politically excluded from responsibilities in the major institutions of power
2. receiving less than their share of goods, services, values, rewards, power, prestige, and prerogatives
3. perceived by the dominant institution as deviant, difficult, inferior, or wrong, or somewhat more positively, different, or interesting.

The U.S. Department of Education's Office of Civil Rights 1987 projections showed a pattern of overrepresentation for African-American students and other minorities in most categories. Harry (1992), discusses that the literature supports the fact that there exists an overrepresentation of children from minority populations in disability categories such as educable mentally retarded (EMR), behavioral disorders/serious emotional disturbance (BD and SED), and learning disabilities (LD). According to Harry, "there is a disproportionately high placement of African American, Hispanic American, and Native American students in special education classes. There are not verifiable explanations of the patterns observed in minority overrepresentation."

The most recent studies concerning placement of Hispanic students were completed over 10 years ago. This research showed that a previous overrepresentation of Hispanic students in classes for the mentally retarded had declined; however, there was a serious overrepresentation of students identified as having a learning disability. Hispanic students were underrepresented in other disability categories and in programs for the gifted and talented (Ortiz & Yates, 1983). This emphasizes the need for new research to investigate referral rates for students from Hispanic populations.

Ramirez and Johnson in Ortiz and Ramirez (1988) reviewed data from studies supported by the Office of Civil Rights, U.S. Department of Education. These data indicated that there had been an 8 percent increase in the number of American Indians attending public elementary and secondary schools between 1978 and 1986. During the same time, however, there had been a 41.8 percent increase of American Indians in classes for the mentally retarded, speech impaired, seriously emotionally disturbed, and learning disabled.

Special education for Asian Americans presents a unique set of problems. The identification and treatment of Asians with disabilities may be adversely affected by cultural mores and tradition (Leung, in Ortiz and Ramirez, 1988).

These factors coupled with the statistical breakdown of students with disabilities by race (see Table I-1) sends a signal of paramount importance to educators and administrators.

Table I-1 **Statistical Analysis of Students with Disabilities by Race (%)**

	Native-American	Asian	Hispanic	African-American	White
Total Enrollment in School System	1	3	12	16	68
SPECIAL EDUCATION CLASSIFICATION					
Mental Retardation	1	1	11	34	53
Speech Impairments	1	2	9	16	73
Serious Emotional Disturbance	1	1	6	22	71
Specific Learning Disabilities	1	1	11	17	70

Source: Adapted from the Office of Civil Rights, the National and State Summaries of Data from the 1990 Elementary and Secondary School Civil Rights Survey, 1992.

Danger Signs of Overrepresentation of Minorities in Special Education
The following "red flags" may indicate a school or district has a disproportionate number of students from diverse cultures in special education programs (Peenan, 1995):

- High proportion of special education students are ethnically diverse.
- High proportion of culturally diverse students within certain special education programs, such as programs for behavioral impairment or mental retardation.

- Students of all races and ethnicities not having equal access to a district's prereferral intervention program or the same quality of program.
- High number of students from one race or ethnic group being referred for evaluation.
- Reasons given for special education referrals being disproportionate by race or ethnicity.
- Patterns of placement differing by race or ethnicity.

The causes of disproportionate representation can be attributed to a combination of factors such as poverty, migrancy, cultural and social morals, and conceptualization of differences among cultures (Hardman, Drew, & Egan, 1990).

In 1992, the 14th Annual Report to Congress on Implementation of IDEA revealed some interesting facts and figures with regard to poverty and youths (ages 13-21) with disabilities. Youths with disabilities are much more likely to live in single parent families and in families characterized by lower socioeconomic status than the general youth population. (See Table I-2.)

Table I-2 Comparison of Secondary School Youth with Disabilities and the General Population of Youth on Socioeconomic Factors

	Disabled	General Population
Single parent family	37	30
Head of household—some college	23	35
Household income—below $25,000	68	55

Adapted from 14th Annual Report to Congress on Implementation of IDEA, (1992), p. 14.

Frequently, children represented by these statistics have the added problems of chaotic home environments, lack of parental supervision and involvement in school activities, and less support and encouragement for educational outcomes. These factors may exacerbate problems in the classroom that can result in behaviors associated with ADHD (Barkley, 1990). A large segment of minority populations falls below poverty levels (Sleeter & Grant, 1993). Parents of children in this population often are poorly educated and are not familiar with their children's educational rights (Cassidy, 1988) or the most effective methods of addressing the educational system. In addition, lower socioeconomic status may result in poor prenatal and early childhood nutrition, resulting in actual disabilities (Weiner, 1991, as cited in the 14th Annual Report to Congress, 1992). There appears to be a strong link between the extent to which poverty and its concomitant problems contribute to educational difficulties exhibited by many minority students (Schifani, Essex, & Wright, 1992).

Reyes cautions teachers to be aware that "In many cultures...a stable family does not necessarily mean a nuclear family. Extended families perform effectively and are considered a norm..." (1995).

Identification and Evaluation

Educational assessment takes on two different perspectives when it comes to minority and multicultural students with ADHD. First, it involves the traditional formalized assessment procedures and utilization of standardized and commercially produced tests. Second, it involves the actual in-class paper and pencil test developed by the classroom teacher. Both approaches may be somewhat inadequate when it comes to assessing the needs of minority children with ADHD (Wright, 1993). One of the primary problems is the lack of a systematic approach that has been identified specifically for dealing with multicultural and/or minority ADHD populations, which further supports the need for additional research. (Presently, most of the evaluation approaches are focused on needs and characteristics of the majority culture.) There is a great need for developing a multicultural sensitive, holistic approach to better meeting the needs of these children (Patton, 1992). Ogbu (1988) stated that I.Q. tests, for example, measure distinct Eurocentric cognitive skills specific to the Western culture. Based on the fact that these tests are grounded on a sampling of cognition and behavior valued by the middle class in Western societies, they inevitably discriminate against members of other cultures. Therefore, they cannot truly measure intelligence of groups such as African Americans.

The population of culturally diverse children with ADHD varies across regions as well as school systems. If a teacher is to be successful in teaching culturally diverse children with ADHD, he or she should become familiar with their cultural background. The teacher needs to conduct a complete analysis of the child's culture and family background utilizing available school records and input from other professionals (Franklin, 1992). The teacher should establish files on each child to plan appropriate instruction and adapt teaching approaches to accommodate these variables. The challenge for the teacher is to individualize instruction based upon assessment results. Modifications for individual children with attention deficits can be made in the regular classroom.

Multicultural Curriculum and Instructional Practices

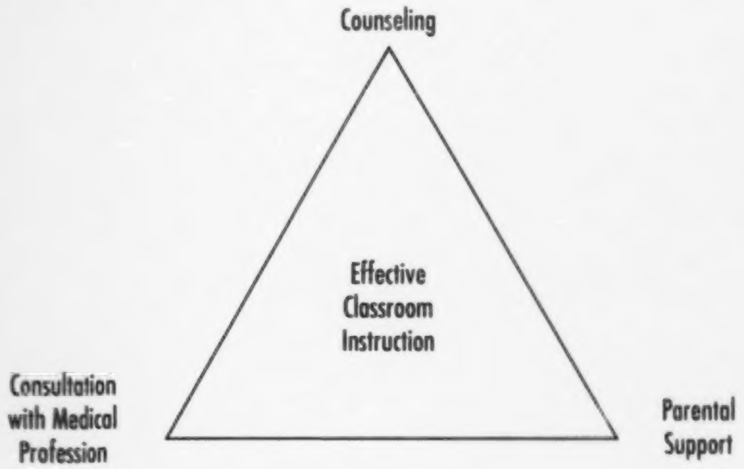
All children with ADHD should understand that they are appreciated and respected, and that the teacher has expectations for their success. Teachers should treat students with respect and dignity in order to establish rapport with the students as they move forward with instructional demands. Franklin (1992) recognizes seven attributes needed to establish teacher-student relationships: teacher attention, nurturing, acceptance, constant encouragement, recognition, warmth, and reassurance. These positive influences help to decrease the amount of disruptive behavior and increase the productivity of students with ADHD (Rief, 1993).

Language barriers, in addition to problems of inattention, hyperactivity, and other characteristics associated with attention deficit/hyperactivity disorder, offer unique challenges to the classroom teacher. Research has shown that developing competence in the native language, rather than focusing on the acquisition of English, will improve students' overall academic performance (Crawford, 1989; Cummins, 1989; Garcia, 1988; Pease-Alvarez & Hakuta, 1992; Truba, 1989.) Optimally, for the instruction of the student with ADHD who is bilingual, teachers, para-educators, and others should be skilled in the student's native language. This serves to bridge the gap between language and classroom behavior and instruction.

The approach to curriculum for the multicultural student with ADHD must be one that incorporates the experiences and interests of the student into the standard curriculum (Sleeter & Grant, 1993). In this way the curriculum becomes more relevant and meaningful to the learner. The teacher should consider the academic concept he or she is teaching and how to relate that concept to a student's personal, home, or community experiences, thus broadening the student's basic knowledge base.

Effective classroom instruction is necessary for children with ADHD from multicultural populations to experience educational advancement (Wright, 1994). Three major elements can affect success in the classroom when working with multicultural students with ADHD. The elements are: counseling, parental support, and consultation with the medical profession. (See Figure I-1.) Within the triangle of services for multicultural students with ADHD, issues such as language differences, evaluation, and consultation are very critical to inclusion of these students into the instructional process.

Figure I-1 **ADHD Triangle of Services**


Counseling
Effective Classroom Instruction
Consultation with Medical Profession
Parental Support

Source: Wright, 1992

Conclusion

In order to help prevent further misrepresentation in special education, it is important for teachers of children from minority populations to:

- observe children in multiple and varied settings
- enlist parental involvement to clarify "differences" versus "disabilities" or "special needs"
- honor diversity—adopt a holistic approach that respects cultural differences
- become aware of intentional and unintentional discriminatory acts
- adopt individualized instruction when necessary.

Major changes must take place in education in order to adequately address the unique learning needs of multicultural students with attention deficits. The following concerns need to be addressed:

1. Greater collaborative effort among families, schools, and community.
2. Enhanced communication among medical, educational, and other professional communities.
3. Funding for research and program improvements, as well as for centers for information dissemination and technical assistance.
4. Professional development at the preservice and inservice levels. Expanded university preservice training programs that include more information on multicultural populations in general, and considerations relating to ADHD specifically. Programs need to be revamped rather than adding a course, unit, or seminar.
5. Improved assessment and identification procedures.

Banks 1989 stated that multicultural education is a continuing process, because the idealized goals it tries to actualize—such as educational equality and the eradication of all forms of discrimination—can never be fully achieved in a human society. As we develop educational programs for children with ADHD from multicultural backgrounds, we must be sensitive to the myriad social and cultural issues. The need to provide services to these students is not new; it has just not been a priority in research and program development.

REFERENCES

MODULE I

Characteristics and Identification

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DISCUSSION QUESTIONS

MODULE I

Characteristics and Identification

1. How has our understanding of attention deficit/hyperactivity disorder changed over the years?
2. What do we currently know about ADHD?
3. What areas of an individual's life may be affected by ADHD?
4. How is ADHD diagnosed?
5. What other factors can lead children to behave as though they have ADHD?
6. Can ADHD coexist with other conditions?
7. What are some considerations critical to good assessment?

Multicultural Considerations

1. What are some of the educational issues to consider when working with a diverse school population?
2. What are some of the problems involved with the over- and underrepresentation of minorities in special education?
3. Are there any special concerns regarding assessment of multicultural students with ADHD?
4. What are some ways teachers can foster success in the classroom?

MODULE II

MODEL SCHOOL PROGRAMS

This module, as well as Module III, takes the position that in the majority of cases administrative, instructional, and management changes that are beneficial for students with ADHD are beneficial for everyone. When a teacher adds to his or her repertoire of skills to meet the needs of a student with ADHD, the new skills will be used daily with other students (Reeve & Welch, 1993).

Model school programs represent the best we know about learning. Such educational programs provide a classroom environment designed to promote self-awareness and self-management. They provide dignity while fueling the energy of learning. These programs offer equal access to exciting and relevant learning experiences for all students through appropriate teaching strategies.

This module reviews current research and thinking about innovative programming in our schools, examines the characteristics of effective school programs, and provides examples of schools across the nation that have successfully implemented model programs.

The recommended innovations for all learners are of particular importance to children with ADHD. Correcting the "errors of our educational ways" is urgent for our students with attention deficits who have struggled with teaching environments that are frequently mismatched with what they need.

Research on How Children Learn

We are in the midst of educational change that is challenging some strongly held beliefs. Caine and Caine (1991) stated that educators, by being too specific about facts to be remembered and outcomes to be produced, may inhibit students' genuine understanding and transfer of learning. Teaching in the traditional way is demanding but not very sophisticated. Teaching to the human brain, however, when based on a real understanding of how the brain works, elevates teaching into a challenging field requiring the finest minds and intellects.

Educators are aware that schools must change. Research now suggests that we need to move beyond simplistic narrow approaches to teaching and learning. Changes will be made not only in what we teach, but in how we teach, and the environment in which we teach.

Educational Change and Students with ADHD

Students exhibiting the characteristics of ADHD are in both general and special education classrooms. Educators want information on how to provide support to children with ADHD before the characteristics cause such children to fall into a rapidly accelerating downward spiral of academic and social failure.

As stated previously in this manual, ADHD affects 3 to 5% of school-aged children and adolescents (American Psychiatric Association, 1994). Many children with ADHD are of average or above average ability. However, their performance is compromised by inattention, impulsivity, distractibility, disorganization, memory problems, and difficulty with written tasks. The disorder can involve hyperactivity and inconsistent performance. Often there are coexisting learning disabilities, language disorders, and social skill deficits.

Students diagnosed with ADHD may qualify for special education, but in order to be eligible for these services (under Section 504 or IDEA) the disorder must first show an adverse impact on the child's academic performance. Therefore, children who are experiencing difficulties often fail to receive any assistance until after their difficulties have caused them to fall significantly behind their classmates. Why must we allow a child to drop to the bottom before we attempt to provide a workable environment?

Some of the most at-risk children in our classrooms are children with ADHD. We can do something to make things better for them and other at-risk children we serve. There is no cure for ADHD, but we can create an effective classroom environment for the child with ADHD.

School Reform

> *We must confront our knowledge and use it to guide our efforts; then we must operate our schools in different ways, using our knowledge (Carl Glickman, 1991).*

Schools must begin by identifying key issues that frame and shape curricula. They must deepen their understanding of the issues and take positions on the key issues that serve as guidelines for making curricular decisions. Restructuring of schools is based on student performance and the belief that all students can and must learn at higher levels.

Deficits are magnified in a setting such as schools where there are constant demands to perform and demonstrate knowledge in ways that are difficult for the student with ADHD. Frustration, emotional outbursts, anxiety, depression, humiliation, and low self-esteem can be the result. Teachers knowledgeable about ADHD are utilizing trends in education to allow students with ADHD to compensate for their difficulties. Student outcomes improve significantly (Michigan Department of Education Task Force Report, 1993).

Emerging Trends in School Reform

Many trends are emerging in the field of education that have the potential to improve the educational process for children with ADHD:

- Recognition that textbook content must be enlivened
- Less reliance on basal readers and textbooks and more reliance on supplementary resources
- More context-related curriculum
- Focus on interdisciplinary teaching
- Recognition that curriculum should stimulate critical thinking, discussion, and problem-solving
- Recognition that all children (including disadvantaged children and those with disabilities) should be learning from a challenging curriculum

From these trends, we see movement from the traditional requirements of memorization of unconnected content to an environment where content is connected and students build on current knowledge and personal experiences. As teachers begin to let go of "their plan" for the school year and share in their students' curiosity, a new, meaningful curriculum emerges.

As teachers rely less on basal readers, they have the opportunity to provide appropriate activities for children with various learning styles. Activities offering choices and capturing a child's interest will keep a child actively engaged in learning. The child with ADHD who has difficulty focusing and attending will stay on task when an opportunity to satisfy curiosity, discovery, and challenge is provided.

By taking advantage of the childrens' curiosity on a topic, the curriculum is expanded to integrate several content areas and stimulate critical thinking and problem-solving. The orchestrated environment allows the child with ADHD to explore, make choices, and interact with others. The new trends allow the educator to tailor learning to fit the learner — including the child with ADHD—rather than making children "figure out" how to fit into the narrow teaching styles and methods used in traditional classes.

Effective school programs create a positive school climate and provide the support and flexibility to address the diversity of each student. Such environments respond to the basic needs of all students thus allowing learning to take place. According to Glasser (1986) humans not only need to survive and reproduce, but they also need:

> *Belonging and love:* Do students sense that they belong? Are they friendly with other students and supportive of you and each other?
>
> *Gaining of power:* Do students realize that there is power in knowledge —not just for a few "winners," but for all?
>
> *Freedom:* Do students have the freedom to choose what to study or have any input in how they might prove to you that they are making progress? Are they free to leave class to go to the library?
>
> *Fun:* Is there laughter and good-natured clowning in which the teacher is an active participant?
>
> *"Learning occurs as the brain seeks to identify the best action plan to pursue to meet the five basic needs" (Glasser, 1986).*

Core Characteristics of Effective School Programs

The following core characteristics are taken from the research on effective school programs. These characteristics have major influences on the creation of a friendly climate for children with ADHD. Susan Kovalik (1989) bases her inservice training on many of the philosophies shared elsewhere in this module. Kovalik's core characteristics include:

1. *Commitment to the creation of a "safe" classroom community environment—establish expectations for the classroom.*

   Trust: The job of learning takes a backseat until trust has been established in the classroom. Without trust, teachers become discipline managers—a nonrewarding position requiring an enormous amount of nonrenewable energy.

Truth: Accurate self-esteem is far superior to just positive self-esteem.

Respect: Whether in a family or in a classroom, the first consideration is respect.

No put-downs: In eliminating belittling remarks, awareness is the first stage of change.

Cooperative active listening: The process that asks the audience to add to their understanding, to question, and to make judgments.

Personal best: The expectation that a job will receive the best effort from individuals, reflecting their personal expectations for quality work.

2. *Respect for the innate diversity of each individual learner by providing many opportunities for learning in a variety of styles.*

> It is of the utmost importance that we recognize and nurture all of the varied human intelligences, and all of the combinations of intelligences. We are all so different largely because we all have different combinations of intelligences. If we recognize this, I think we will have at least a better chance of dealing appropriately with the many problems that we face in the world (Gardner & Hatch, 1990).

Howard Gardner's theory of multiple intelligences has the potential to change our schools dramatically. Gardner stresses that not all learners are "smart" in the same way. His theory of multiple intelligences proposes that individuals are intelligent often in each area listed below. We can, with a properly orchestrated learning environment, create a classroom to help children grow in all areas and achieve greatly in the individual's area of strength.

Multiple Intelligences

- Logical-mathematical: sensitivity to, and capacity to discern, logical or numerical patterns, ability to handle long chains of reasoning (scientist, mathematician).
- Linguistic: sensitivity to the sounds, rhythms, and meanings of words; sensitivity to different functions of language (poet, journalist).
- Musical: Ability to produce and appreciate rhythm, pitch, and timbre; appreciation of the forms of musical expressiveness (composer, violinist).
- Spatial: Capacity to perceive the visual-spatial world accurately and to perform transformations on one's initial perceptions (navigator, sculptor).
- Bodily-kinesthetic: Ability to control one's body movements and to handle objects skillfully (dancer, athlete).
- Interpersonal: Capacity to discern and respond appropriately to the moods, temperaments, motivations, and desires of other people (therapist, salesperson).
- Intrapersonal: Access to one's own feelings and the ability to discriminate among them and to draw upon them to guide behavior; knowledge of one's own strengths, weaknesses, desires, and intelligences (person with detailed, accurate, self-knowledge) (Gardner & Hatch, 1990).

3. *Commitment to provide a meaningful curriculum.*

"Meaningful" goes beyond content and involves the physical and emotional environment in which instruction takes place. Not all students need to learn from the same curriculum; different students may benefit from different though equally challenging materials. Allow for student choices.

Marie Carbo, a well-known and successful teacher of at-risk children in Chicago, knows the power of allowing children to choose how they will learn. Each student has a preferred way of learning that he or she knows is more effective and reliable. Teachers can tap into those preferred ways by providing choices in the classroom. Ms. Carbo believes that a school's failure to provide those options or choices results in the dropout of students who are most mismatched with traditional teaching strategies.

Meaningful content should be presented creatively—it should be useful for real world application. It is experiential as the student makes an emotional connection —for example, pleasure, discovery, curiosity, fun. It should evolve out of an interrelated curriculum where the core curriculum areas of communication, math, science, and social studies are connected through meaning and activity. The use of current events allows for real world application and can often capture the passion of students' learning. Through political action children have a powerful vehicle for applying what they learn to real world problems. Meaningful content raises student awareness of the power of involvement in community action and how they can become contributing citizens.

A meaningful curriculum is often achieved through the use of thematic instruction. Teachers have been successful with major year-long themes or with smaller units of instruction. Rather than teaching subjects in disconnected segments throughout the day, the central theme serves as a hub from which the content areas are connected within projects and activities.

Theme or unit teaching allows for:

- increased opportunity for choices
- increased opportunity for students to collaborate
- meaningful content in course work
- various levels of difficulty on the same topics
- increased opportunity to learn through various learning styles
- appropriate time for mastery for all learners
- challenging activities for the gifted using their areas of giftedness
- safe, nonthreatening environment
- increased opportunity for political action
- increased opportunity to capture individual student's interest

Susan Kovalik (1993) contends that with the knowledge we now have about the brain, a classroom teacher can "orchestrate learning" to a degree never before considered. Her recommendations are for a classroom environment that enables the cerebral cortex (the learning level) to operate most efficiently. Her work is based on the writings of Leslie Hart (1983) and Renate and Geoffrey Caine (1991). Her components for effective classroom environments include:

Trust: an absence of threat that is provided through consistency in everyday expectations.

Meaningful content and choices: integration of content allows a learner to purposefully see how the world works and how it relates to ourselves, our needs, and motivations. Choices allow the learner to select, based on personal preference, those sensors that he or she trusts the most to provide a reliable interpretation of what is happening.

Adequate time: is needed to accomplish mastery. Using fragments of time and bouncing from one concept to another ensures that some students will not reach mastery. All students need adequate time, and that length of time will differ for each student.

Enriched environment: classrooms must reflect what is available in the world so students can touch it, taste it, and experience it. An enriched environment is supplied with real world materials. Choices abound, and students and teachers feel a sense of trust and excitement for learning.

Educators should consider the following additional components:

Collaboration: when students are placed in small heterogeneous, cooperative groups and assigned specific roles, achievement increases and their psychological health often improves.

Immediate feedback: positive, immediate feedback can be achieved when direct instruction time is reduced. If the teacher structures activities so that the students are the workers, the teacher can circulate and provide feedback.

Based on what we know about comfort level and its relationship to learning, implementing the above components will create a more compatible environment for the child with ADHD. The simple reduction of threat and stress will create a happier, more efficient learner.

4. *Professional collaboration and parent/professional collaboration.*

Many parents and professionals believe that the key to creating positive climates lies in improving professional preparation for all teachers and administrators. Effective staff development is essential for programs that use collaborative strategies. Teachers and school leaders need to have the necessary skills to recognize diversity in students and to work with other professionals as necessary to provide the student with the particular support he or she needs to learn.

Requirements essential for effective collaboration:

- Recognition of the need for collaboration
- Time
- Understanding and accepting the constraints of confidentiality
- Reasonable expectations from one another

Multidisciplinary Collaboration

Professional collaboration and parent/professional collaboration is essential to the appropriate assessment and identification of children with ADHD. Recognition of the need and benefits of collaboration are the first steps. If a physician thinks that a teacher's comments are irrelevant, there will be no collaboration. If a parent feels it is necessary to exclude a teacher from the information loop, there will be no real collaboration; and if a teacher feels it is not worth the effort to respond to yet another request for questionnaires, there will be no multidisciplinary evaluation.

Acceptance of the constraints of confidentiality imposed by the parents and doctors may often seem unfair to the teacher. Teachers are asked to contribute a great deal of time in the evaluation process, but are often not given any feedback about the diagnosis or treatment plan. Asking the parent to be the means of communication between the school and doctor assures parents that he or she will have control of this information. This may result in greater cooperation.

> Developing reasonable role expectations may be the most difficult obstacle to overcome, not only because so many different professions are involved with these families, but because within professions, providers take a variety of roles (Michigan Department of Education Task Force Report, 1993).

The concept of including children with learning or behavior difficulties in the regular classroom is emerging, but under great debate. Simply placing these students into regular classrooms will not work. Support and staff development must be provided to teachers and staff. Inclusion (or successful classrooms for all) will only succeed if efforts are closely aligned with ongoing restructuring efforts.

Part of those efforts include the use of special teachers in the classroom working collaboratively with the regular classroom teacher to create a child-friendly climate. Teaming is done, not to increase our efficiency, but to allow us to change how we "deliver" education to students. Teams provide a support system for team members. Individuals assume ownership for contributing to team progress. There is great potential for personal and collective performance levels to increase. In addition, teams may provide more creativity, productive teaching and learning, efficiency, and fun.

A Successful Model Program

CUE, Coloma Schools, Coloma, Michigan

In 1989, Project CUE (Creative, Useful, and Experiential Learning) was developed through a grant from the Michigan Department of Education, Special Education Services. The purpose of the project was to investigate alternatives to special education programming. Elaine Weckler, Professional Development Coordinator for Berrien County Intermediate School District in Michigan, created the program and training model. Coloma Schools served as the on-site location for CUE's initial implementation. The project has since turned into a school improvement initiative, which impacts all children in the district. It has proven to be a positive environment for children with ADHD.

The premise that children should learn in an age-appropriate setting with their peers and the belief that we could not return students to the original environment in which they failed led the initiative. Training began with teams consisting of the regular classroom teacher, a special education teacher, and a reading teacher. Together the team orchestrated an environment in which all children can learn.

The components of the CUE project were developed based on thematic teaching. Through a classroom theme, teachers developed a curriculum to include activities on all levels of Bloom's Taxonomy while addressing the various learning styles and intelligences. Creating a caring community environment is a major objective during the first weeks and is reinforced throughout the school year. Children discover the value of cooperative learning, respect for difference, truth, and honesty.

The inservice program began with training from Kovalik Associates. Teachers learned to create an appropriate theme and several units under that theme. Additional local training developed teacher skills in cooperative learning, collaborative teaching, awareness of learning styles, and implementing new research-based teaching strategies.

Teachers developed desired outcomes for each unit that they aligned with the school board's approved curriculum. Children were given a choice of activities to select to learn the required curriculum. Specialist teachers ensured that activities designed to meet the educational goal of the special needs students were included.

Documentation through standardized tests, parent/student interviews, and teacher change was compiled through Western Michigan University and Andrews University. Data shows academic gains for all students. The program also resulted in increased teacher enthusiasm as they reclaimed the curriculum. They felt empowered as they created the synergy of collaboration.

Effects of labeling on students were removed. School became a happier place for all students and proved to be a successful environment for most children with ADHD. Concerns that children with ADHD would be highly distracted by various activities in the room were unfounded. When actively engaged in exciting learning, the child with ADHD was found to be attentive and interactive with the curriculum beyond what he or she was able to accomplish in the traditional classroom.

For example: The 3rd-grade class began their year by assuming the role of aliens from another planet. Cooperative groups had defined their planet, constructed a typical village on that planet, and written characteristics, taking into consideration atmosphere and gravity. They built spaceships, studied the stars, and read related trade books. One day, out in their spaceships, they came across a large ship displaying the words "USA Earth." The children decided to try to locate its origin. As they studied the galaxies they found the mysterious Earth. Not sure if the inhabitants were friendly, they landed on the moon to observe. Thus started the unit on the Earth's weather.

When the children attempted to enter their classroom, the door was shut. A sign on the door read "Storm in Progress—Do Not Enter." Mystified, the students followed the special education teacher to another room where they completed activities as they waited to get into their classroom. The teacher arrived in her raincoat, dripping wet, with the news that they could safely return to their class. As the students entered, the room was dark except for the flashes of lightening (cameras). The sounds of thunder and rain assaulted their ears (tape recorder), as sprinkles of water fell on their heads (splashed by another teacher behind a divider).

When the lights finally came on, the students' desks had been arranged in groups with storm names hanging over each team (snowstorm, thunderstorm, hurricane, tornado, hailstorm, desert sandstorm, etc.). They spent the rest of the day telling stories and reading about storms. The day was concluded by watching the tornado scene from *The Wizard of Oz*. The unit continued for 6 weeks. Children read storm-related trade books and did mathematical computations on wind speed, average rainfall, and cloudy versus sunny days. Cooperative groups did research on their storm, constructed visual aids, wrote papers, and presented to the entire group. Each team became an "expert" on their storm. They proceeded on to their next unit of "checking out" the inhabitants of Earth by grouping to study the various systems of the human body.

This program incorporated the following positive characteristics:

Integrated content structure–*all learning is related.*

Brain compatible learning–*environment is comfortable and nonthreatening.*

Meaningful content–*students feel a "need to know."*

Learning styles–*students have choices and the opportunity to learn through their individual learning styles.*

Co-teaching and planning–*Synergy of collaboration provides a support system, causes "ownership," and increases collective performance levels.*

Elements to Make the Program Work

- Active commitment and visible support from the administration and the school board.
- Planning time made available for collaboration.
- Resources made available to allow the creation of a variety of learning materials and experiences.
- Follow-up training or teacher coaching to support teacher change.
- Redirecting money from sources such as workbooks to the purchase of trade books and hands-on materials.

Outcomes of the Program

- Increased academic achievement for at-risk children.
- Increased parent involvement.
- Re-energized teachers and learners.
- Established a community environment where students learned to work together.
- Empowered teachers to make educational curricular decisions resulting in increased commitment for student success.
- Developed collegiality and value for the diverse skills of co-teaching teams.
- Established equity through elimination of ability grouping and pull-out programs.
- Decreased referrals by one-third to one-half.

OTHER PROGRAMS

Several other programs across the country have proven successful for children with attention deficit/hyperactivity disorder. In 1991, the University of Kentucky's Federal Resource Center (FRC) received funding from the U.S. Department of Education, Office of Special Education Programs, to identify and report on successful programs in educating students with attention deficits. The FRC identified several programs that had implemented promising educational practices for students with ADHD, and selected 26 sites located across the country for an in-depth study. These school-based approaches included a variety of promising identification and intervention practices. The following commonalities were found:

- Attention to individual differences when developing educational plans.
- Staff commitment to work with students with ADHD; staff members understood the complexity of the disorder, and believed in the services they were providing.
- Appropriate match between teacher expectations and student performance.
- Assessment of the social competence of students with ADHD. A variety of social skills training programs were provided.
- Administrators' recognition and support for the development and implementation of promising practices for children with ADHD.
- Genuine commitment to working with students' families.

One of the programs identified by the FRC was located in Broward County, Florida. A Superintendent's Task Force Report on Attention Deficit Disorder (1991) recommended a prereferral intervention model for better meeting the needs of children with ADHD. This model emphasized a team approach involving the special educator, general educator, counselor or school psychologist, and others with expertise in ADHD such as the child's physician, behavioral specialists, social workers, and a reading specialist. In this approach, one team member was designated as the case manager and monitored the student. The prereferral process included assessment, intervention, and evaluation. The team assisted in assessing progress until the effective interventions were found, or it was determined that more intensive intervention was required, such as special education referral.

Sandra Rief (1993) identified three exemplary model programs—the Project for Attention Related Disorders (San Diego), the Key School (Indianapolis), and the Mentor Program (Minneapolis/St. Paul). These programs also encompass many of the components identified as critical to successful programming for students with ADHD.

As educators strive to develop effective programs for children with ADHD, it is helpful to recall the words of a teacher at Breidablik Elementary School in Paulsbo, Washington: "we need to teach the children we have, not the children we used to have, not the children we want to have, not the children of our dreams."

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MODULE II

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SUGGESTED READING

MODULE II

Model School Programs

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DISCUSSION QUESTIONS

MODULE II

Model School Programs

1. What is the purpose of model school programs?
2. What are some of the characteristics of model programs?
3. Discuss the rationale for the collaborative teaching approach.
4. Describe a model school program in some detail.
5. What aspects of a model school program contribute to the success of students with ADHD?
6. Reflect on your school or classroom situation. What characteristics of model school programs are in place?

MODULE III

EFFECTIVE CLASSROOM INTERVENTIONS

First, the good news

- Anything you add to your repertoire of teaching skills for the student with ADHD will be valuable for other students.
- Many effective interventions are inexpensive.
- The trend toward developmental, child-centered, experiential learning is probably better for the student with attention deficits. Students have more opportunities to move, and the curriculum is more likely to capitalize on student interests. A developmentally appropriate classroom does not have the *same* structure as a traditional classroom, but it is typically well-structured. It may, however, be more difficult for the student with attention deficits to discern the structure or rules in such a classroom. The rules will have to be made more overt.

Now, the bad news

- Students with ADHD take teacher time and energy. Even though most of the recommended strategies will be beneficial for other students as well, they remain strategies that many teachers will have to add to their repertoire of teaching skills. There are no "quick-and-easy" answers. There is only one real choice: *be reactive or proactive.* Proactive behavior is better for the teacher, better for the student with ADHD, and better for the other students, *but, it requires planning ahead.*
- There is no cure for ADHD. All interventions, whether medical, educational, or psychological, help children and their families cope with the disorder. We do not cure ADHD any more than we cure cerebral palsy. Interventions typically fall into one of two categories: environmental modifications or compensatory strategies.
- Behavioral change is difficult. Adults who are frustrated with the difficulty of changing student behaviors typically forget how difficult it is to change their own behaviors. Knowledge and good intentions do not always result in behavior change. New behaviors, once acquired, are difficult to maintain. Behavior management means managing the behavior of the adult, not the child. When adults behave in proactive ways, children are less reactive in their behavior.

Behavioral Interventions

Build Rapport

Effective behavior management of students with ADHD depends on affect and rapport at least as much as on consequence and cognition. Students with behavior difficulties will behave very well for adults with whom they have rapport and mutual affection, even in the absence of well-structured consequence systems. Rule and consequence structures, no matter how well administered, are usually ineffective if an emotional bond is not established with the child.

Maintain Proximity

- Physical proximity to the students is the most effective means of controlling unwanted behavior in the classroom.

- Proximity allows behavioral correction without negative verbal comments.
- Self-correction of behavior by students must be positively reinforced.
- Room arrangements should facilitate proximity—"walking the perimeter."
- The most important behavior management rule for teachers is: *Don't sit down and don't stop moving.*

Maximize Positive Consequences
All students behave better for some teachers than they do for others. In fact, the difference in student behavior is usually related to differences in teacher behavior. Teachers should not underestimate the power of genuine, appropriate, personalized, positive attention. It is important to find ways to tell students what they are doing *right*.

- Students with ADHD receive more negative attention than positive.
- Negative attention increases undesirable behaviors.
- The ratio of positive to negative attention must be reversed.

Take time to teach the behavior you want. Time spent teaching classroom rules and routines is never wasted.

Practice rules and routines as often as possible during the first week of school, daily during the next few weeks, Monday mornings, and after vacations.

Use positive practice. Back up and replay the situation, substituting appropriate behavior for inappropriate behavior.

- Frequently practiced behavior is more likely to occur than less frequently practiced behavior.
- The teacher must provide multiple opportunities to practice desirable behaviors. However, this will not work if the teacher becomes punitive.
- Positive practice will be particularly effective if teachers sometimes model backing up and choosing a more appropriate response for themselves. This may involve asking a student who has been reprimanded in a more negative way than was desirable to replay his or her behavior so that the teacher can use a different intervention. The student can then model responding more positively to the second intervention. Student and teacher thus share responsibility for replaying and repairing the interaction.
    - Shared responsibility decreases the opportunity for power struggle.
    - Shared responsibility increases teacher empathy.
- Model the *process* of accepting responsibility and working for change. When teachers use a timer to structure their lesson presentation, count and chart their own behaviors, or replay a negative interaction with a student by modeling a more appropriate **teacher** behavior, students may view strategies for behavioral change in a more positive light.

Use nonverbal and verbal strategies to remind students of classroom rules and routines.

- Post visual reminders of classroom rules and routines—for example, signs, key words, cartoons, diagrams, and examples of page headings.

- Use American sign language signs or gestures to prompt—for example, sit down, stop, name, and to praise—for example, "thanks," "good job!"
- Restate the rules *before* the opportunity for rule infraction.
- Provide specific prompts—for example, "Remember to put your name at the top of the page."
- Resist the temptation to lecture and blame.

Use verbal and nonverbal strategies to provide positive attention.

- Use the student's name.
- Match the amount and type of attention to student need. Some students are "praise junkies." They love lots of public attention, even if it is for trivial behaviors. Other students are embarrassed by public attention. Embarrassment is likely to lead to misbehavior and/or lack of trust.
- Praise specific behaviors—for example, "Thanks for remembering to put your name on the page," or "Your use of metaphor really helped to get your point across."
- Praise by attribution—"That's smart. Good spellers change a word if it doesn't look right."
- Teacher proximity makes it possible to attend to a student without making a public display. Students often respond positively to private attention but negatively to public attention.
- Eye contact can be a way of providing positive nonverbal attention. Teachers must be aware of the possible ramifications of eye contact across racial, ethnic, gender, and/or socioeconomic status differences.
- Facial expressions, gestures, and touch can also provide positive nonverbal attention — for example, a smile, a wink, a thumbs-up sign, or a pat on the shoulder.
- Written comments may be particularly effective for students who resist public praise. Positive written comments also help to shape academic behaviors.

Minimize Negative Consequences

- Use verbal correction as a last resort, not the first.
- Avoid even nonaggressive verbal correction (distracts the majority of the rest of the class from task).
- Minimize the use of negative/hostile eye contact as a behavioral control device.
- Never force students to look at you when you are correcting them. Demanding eye contact in instructional situations is useful and desirable. Demanding eye contact when reprimanding a student violates conventional behavior practice (most of us look down when receiving criticism) and adds a second layer of power struggle (if the student does not look at you, you now have to deal with that problem in addition to the original problem). Although many people believe that students should make eye contact as a sign of respect, forced eye contact is not respectful and does not foster respect.
- Control of voice is a critical management device ("softer and closer").

Academic Interventions

Honor Diversity

North American schools serve students who are anything but homogenous. Whether we are considering language, culture, socioeconomic status, learning style, ADHD, or a host of other variables, we have students who are *not* "just like everyone else." Attempts to make them look and act just like everyone else are demeaning, time-consuming, and ineffective. Good classrooms for all students honor diversity, celebrate strengths, and support weaknesses. Academic interventions that honor diversity should work for all students. Academic content should be meaningful and have cultural and personal relevance.

From a Navajo child in New Mexico (Cazden, 1976)

Our teachers come to class,
And they talk and they talk,
Til their faces are like peaches.
We don't;
We just sit like cornstalks.

From an Apache child in Arizona (Cazden, 1976)

Have you ever hurt
about baskets?
I have, seeing my grandmother weaving
for a long time.
Have you ever hurt about work?
I have, because my father works too hard
and he tells how he works.
Have you ever hurt about cattle?
I have, because my grandfather has been working on the cattle
for a long time.
Have you ever hurt about school?
I have, because I learned a lot of words
from school,
And they are not my words.

Activity choices help students to feel more commitment. People are more committed to an activity they choose, even when the choices are limited, than they are to an activity that they are assigned. Activities should provide opportunities to use a variety of learning styles. Activity choices have a number of other benefits, including opportunities to change the focus of attention, opportunities for physical movement and decision making, and opportunities to alternate high-interest and low-interest activities.

Use multisensory teaching

We learn and retain:

10% of what we hear
15% of what we see
20% of what we hear and see
40% of what we discuss with others
80% of what we experience or practice
90% of what we attempt to teach others

- Increase visual teaching/learning strategies by using:
  - posting—the practice of ensuring that the visual stimuli in the classroom are instructional, not merely decorative, so that if a student's attention wanders, he or she is more likely to be attending to something that is related to a unit of study.
  - color coding—subjects, parts of speech, math signs, cues for where to start and stop, and so on.
  - highlighting—directions, key words, new information, the end of drill and practice activities, and so on. Teachers may want to keep a set of textbooks in which they have highlighted important material. Extreme caution should be exercised regarding permitting students with ADHD to use the highlighters themselves. They are likely to highlight too much information.
  - instructional charts showing the sequence of steps. (See F. Jones, 1987a in reference list.)
  - an overhead projector.
- Increase tactile/kinesthetic teaching/learning/responding strategies by using:
  - blackboards.
  - dry erase boards. (See page 5 of *Teaching Exceptional Children* article at the end of this Module for an inexpensive alternative to commercial dry erase boards.)
  - finger drawing—on the desk, in the air, in a hand, on another student's back, on velvet boards. (Cut a cardboard square for each student, staple velvet or a similar fabric to the board and glue a picture by the child to the back of the board to both cover the staples and personalize the board. Velvet boards are particularly effective with students from homes with fewer financial resources, as the students enjoy the richness of the fabric.)
  - tapping patterns—syllables, math patterns, and so on.
  - Touch Math. (Call 800/999-9191 for more information.)
- Increase the variety of auditory teaching/learning strategies by:
  - decreasing teacher talk.
  - using chants/songs/rap/rhyme.
  - using spelling tests on tape—pretests, practice tests, and/or final tests. This provides structured individual practice opportunities. Many students with ADHD benefit from being able to control the speed of a spelling test. Spelling is often difficult for them, and they cannot recall and apply learned spelling patterns as quickly as other students.
  - using books on tape—commercially available, on loan from Recording for the Blind and Dyslexic, 1-800-221-4792, or prepared by teacher or volunteers.

- Increase the opportunity for cooperative learning by:
  - teaching cooperative learning strategies.
  - assigning students a role—reader, recorder, encourager, materials manager, and so on.
- Provide a safe environment for risk-taking by:
  - praising self-monitoring/self-correction.
  - praising effort.
  - using activities with more than one "right" answer.
  - modeling risk-taking.
  - praising risk-taking—If a student does not volunteer in class the teacher can make a private arrangement in which the student will raise his or her hand often, but the teacher will not call on the student unless the student closes his hand into a fist to indicate that he or she wants to respond. Once the student has more experience raising his or her hand without the threat of being embarrassed, he or she is more likely to begin to participate. If necessary, the teacher could have the student practice answers to specific questions ahead of time.
- Accept individual differences when a student reads/writes out of desk or wears his or her coat or cap in class.

Increase physical activity

- Use flexibility in seating postures, permitting the students to stand beside or kneel on their desks or work on the floor.
- Do not change student postures or positions *when the student is on task and not disruptive to others.*
- Use work centers as an opportunity for student choice.
- Employ standing random drills to increase sensory activation and train selective memory. These are brief, rapid drills in which the students stand and the teacher moves around the room pointing rapidly to one student after another to respond. Students should keep their eyes on the teacher and their bodies facing the teacher, which means that students will be turning in place as the teacher moves. Very young students should keep their hands on their desk or chair as "base" so they do not follow the teacher around the room. Drill activities should not be too complex. Kindergarten students can simply say their name when the teacher points to them. Later drills could include spelling their name or rote counting in which each student says the next number. For older students, the teacher can say a spelling word (initially with the word visible on the board) and the student that the teacher points to each say a letter of the word. When the word is finished, all students clap and say the word. Since one of the purposes of standing random drills is to increase sensory activation, simple drills such as rote counting are effective even with older students if the teacher is moving and pointing rapidly.

Individual modifications

- Reduce workload by:
    - reducing the number of items.
    - assigning only odd or even items.
    - permitting dictation to an adult, or onto a dictaphone/tape recorder. If a written product is necessary, either the student or someone else can transcribe the tape.
    - permitting word or phrase responses.
    - exploring alternative response modes.
    - encouraging computer use for instruction as well as reward. (Monitor computer use to ensure that the student is engaged in the assigned activities.)
- Modify grading systems by:
    - accepting alternative response modes.
    - calculating percent correct of number of items completed.
    - contracting specific criteria for each grade.
    - providing opportunities to retake quizzes.
    - weighting assignments—for example, assign all students both a written product and an oral presentation, but give some students greater weight for the written product and some students greater weight for the oral presentation.
- Use daily/weekly reporting systems to provide specific feedback for students and parents.
- Use behavior contracts. It is important for behavior contracts to include the adult's responsibilities for support and/or accommodations as well as the student's.

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Teaching Students with Attention Deficits

The following suggestions are intended to assist the classroom teacher in managing the behavior and academic progress of the student with a short attention span. Some students have Attention Deficit Disorder (ADD) or Attention Deficit/Hyperactivity Disorder (ADHD). Others may simply be less attentive than their classmates, even though their attention is within normal limits for their age. Not all suggestions will work for any given child or teacher. The classroom teacher should use this list as a starting point only.

Enhance the Stimulation of the Learning Materials

1. Add color to new information (graphs, illustrations, key words, etc.).
2. Alternate colored and white paper for worksheets.
3. Permit the student to use a colored pencil or pen on occasion.
4. Permit the student to work problems in an unusual order, that is, from bottom to top, in an "x" pattern, or even numbers first.
5. Involve students in thinking of creative/interesting ways to acquire or practice knowledge or skills.
6. Use manipulative materials, even with older students.
7. Explore novel means of introducing new topics and skills.
8. Take advantage of alternatives to lecture formats, including the use of technological supports, peer tutoring, and cooperative learning.

Limit Environmental Distractions

Students with ADHD do not need a barren learning environment. They benefit from a stimulating but controlled environment.

1. Ensure that potentially distracting stimuli are related to units of study. This maximizes the possibility that a student who is off-task is at least attending to something that will be of benefit for another lesson.
2. Seat the student near the teacher. Make it clear that proximity to the teacher is intended to be helpful, not punitive.
3. Seat the student away from noisy places such as the pencil sharpener and the door.
4. Seat the student near well-behaved peers and away from other students with attention deficits or conduct problems.
5. Consider playing instrumental background music during independent work times. This serves to mask other auditory stimuli. If background music is distracting to other students in the class, consider use of a personal tape recorder and earphones for certain students.
6. Consider permitting some students to wear earplugs or headphones to minimize background noise. The cord can be clipped from headphones which no longer work. These can be made available to any student who wishes to use them.
7. Make a study carrel or other quiet place available as a work area.

Provide Immediate Feedback

1. Use self-checking materials.
2. Put answers on language master cards or audiotape.
3. Permit the student to mark some of his or her own work using the teacher's edition of the workbook.
4. Permit the student to use a calculator or manipulative materials to check the answers to some of his or her math papers.
5. Let students take turns being the "marker" and using the teacher's manual to mark other students' work. Discontinue if students disparage one another's work.
6. Circulate while students are doing independent work, and mark some of each student's work as you circulate.
7. Return homework and other assignments as soon as possible. Students will not put effort into work that does not appear to be valued.

Divide Assignments Into Smaller Units

1. Cut the student's page in half or quarters and give him or her one section at a time.
2. Fold the student's paper in halves, quarters, or accordion patterns.
3. Assign only odd-numbered or only even-numbered problems.
4. Permit the student to color a square on a chart each time he or she completes a page.
5. Use a timer to divide independent work time into smaller units. Set time goals, such as "How many problems can you answer correctly in 5 minutes?" *Make sure that the goal includes accuracy as well as speed or students will be reinforced for rapid, careless work.*
6. Track the amount of work the student usually completes. Then set a goal slightly above the student's average and reinforce the student for reaching that goal. A student who rarely completes more than one-fourth of his assigned work is not likely to be motivated to work for rewards that are contingent on completing work because he recognizes the discrepancy between his usual achievement and the goal. Set goals that are within a student's reach, and work slowly toward completion of all work.
7. Encourage the student to set time and accuracy goals and to chart his or her progress toward the goals. Some students may prefer to keep goals and progress private.
8. Grade the student on the basis of the percent correct if he or she has reached the individual goal you set for him or her. If problems that are not attempted count as incorrect, the student who does not complete his or her work has so little opportunity for success that he or she may view success as impossible.

Provide Teacher-Controlled Opportunities for Movement or for Changing the Focus of Attention

1. Allow the student to sharpen a pencil when he has finished a page of work. If necessary, make him or her the class pencil sharpener.
2. Allow the student to leave his seat to mark a wall chart each time he or she finishes a page, assignment, and so on.

3. Give the student "x" number of passes for pencil sharpening, drinks of water, and so on. Set rules regarding when passes can be used—for example, during independent work time, when a lesson has been completed, every 30 minutes, and so on. Do not permit the student to engage in the activity when he or she has run out of passes.
4. Put a record sheet in the front of workbooks. Allow the student to record the grade for each page completed. Note incomplete pages. Teach the student to calculate percent correct and equivalent letter grade.
5. Use technological assistance. Most computer programs provide immediate feedback and allow the student to control the presentation rate. They are easier to attend to than the teacher. *Computer use should be closely monitored to ensure that time spent on the computer is educationally productive.*
6. Consider putting spelling tests on audiotape; this allows the student to control the rate of presentation. The opportunity to use the tape recorder enhances attention. Older students can be used to record the tests. Some students can even be taught to put their tests on tape and may be highly motivated to do so.
7. Consider allowing the student to dictate writing assignments onto a tape recorder and transcribe the tape himself. Some students will prefer to play the tape several times and write the ideas they dictated without trying to write each word. Tape-recording separates the act of creating from the act of writing, assists students who have memory problems, and provides the additional stimulus of technology. Students are more likely to keep writing if they are transcribing words or ideas they have already entered on tape. In some cases, it may be appropriate to accept the tape-recorded responses without asking the student to write.
8. Allow the student to use a typewriter or word processor if one is available.
9. Assign the student to deliver messages in the school. If necessary, keep a supply of sealed envelopes with other staff members' names on them. When the student delivers the envelope, the staff member opens it and reads a note which says, "This student needed a movement break. Please thank him or her and send him or her back to class."

Limit Homework Assignments

1. Do not assign all unfinished work for homework. The student who does not attend in class is unlikely to attend any better at home.
2. Assign a small amount of homework each night. Students with attention deficits benefit from regular routines and need to develop the habit of doing homework. It is important that the amount of work assigned be realistic for that particular student.
3. Consider using a chart to monitor and reward homework completion. If a student chronically returns no homework, assign short, simple practice activities until the habit of doing homework is developed.
4. Consider alternatives that would permit the student to complete more items. For example, accept single words or phrases instead of complete sentences, permit the student to tape- record some responses, and/or permit the parent to write down some of the student's oral responses. Involve the student and parent in suggesting alternatives. Make sure that the student answers enough items in the usual response mode to determine that he or she has the required skill.

5. Meet with the parents to develop homework routines for the student. Most students benefit from having a specific time and place for doing homework. Some students like to "sandwich" homework between television shows or other activities.

Provide Direct Instruction in Cognitive Behavior Modification

Students with ADHD typically have difficulty applying learned cognitive behavior modification strategies due to their impulsivity, but the strategies remain helpful for some students.

1. Teach the student to observe or record his or her own behavior.
2. Teach the student to recognize possible problem situations.
3. Teach the student to describe the nature of the problem, relevant factors, and possible responses or solutions.
4. Teach the student to consider possible short-term and long-term consequences of his or her behavior. A problem-solving strategy such as STAR (Stop, Think, Act, Review) may help, but the student will require direct instruction and guided practice in using such a strategy.
5. Model "think aloud" and "think ahead" techniques.
6. Teach the student to engage in self-instruction during accomplishment of a problem or task.

Make Behavioral and Academic Expectations Clear to the Child

1. Post charts with classroom rules and consequences for following the rules and breaking the rules.
2. Tape an index card to the student's desk with reminders of the most significant rules for that student. If necessary, tape an index card inside each textbook and workbook.
3. Ask the student to repeat the rule. Use this technique only until the student knows the rules. Most students with attention deficits do not intentionally violate classroom rules—they simply do not think of the rule prior to breaking it. Do not assume that the student does not know the rules or that he or she violates them intentionally. Asking the student to repeat the rule after it has been broken serves no useful purpose once the student knows the rules. It is helpful, however, to ask the student to recite the rule *before* an opportunity for breaking it. For example, ask the student to tell you the rules for appropriate hallway behavior just before he or she leaves the classroom.
4. Explain instructional objectives and evaluation criteria. Students with attention deficits are often unable to judge their work or behavior. They may not understand the relationship between their daily performance and their grades.
5. Specify quotas of productivity and accuracy of work. Make sure the goals are within reach for the student.
6. Reward and punish as soon as possible after the behavior occurs.

Use a Behavior Management System to Improve Time-On-Task

1. Reward completion of specific academic tasks rather than the more nebulous "paying attention."
2. Use a token system where the student receives tokens for certain specified behaviors. Tokens can later be traded for more tangible rewards such as free time, "happy notes" home, stickers, and favorite activities.

3. Use a response cost system, where points or tokens are removed for undesirable behaviors. Use this as a last resort. Children with attention deficits receive much more negative attention from parents and teachers than other students. Too much negative attention will lead to behavior problems in addition to the attention deficit. As a general rule, do not add response-cost until the student has had consistent experience earning tokens or points for positive behaviors for at least two weeks.
4. Involve the student in charting his or her progress as much as possible. For example, play an audiotape that has a tone at random intervals, or set a timer to ring at brief, random intervals and allow the student to check off whether he or she was working when it rang. Most students respond well to having the responsibility for judging their own behavior. It is not really significant if the student's judgment differs slightly from the teacher's, as long as the student attempts to be fair.
5. Use group reinforcers. A student may receive encouragement from peers if the whole class will receive a reward as soon as everyone has reached a goal, or even as soon as a student reaches a personal goal. *Discontinue this system if peers are abusive. Make it clear that the reward is contingent on everyone's behavior and will not be awarded if students harass one another instead of encouraging one another.*
6. Use positive reinforcers. Track the number of positive and negative comments the teacher makes to the student. Does the student receive more attention for misbehaving than for behaving? Increase the frequency and immediacy of positive reinforcers. It may be helpful to have the student with attention deficits track teacher comments.
7. Use prompts to remind children of rules and routines.
8. Develop hand signals so that you can cue a student regarding his or her behavior without interrupting the lesson or drawing undue attention to the student.
9. *Resist the temptation to talk too much.* The less the teacher talks and the less emotion the teacher demonstrates while responding to negative behavior, the more effective the intervention is likely to be.
10. *Use the least powerful reward or punishment that will work!*

Establish a Token System

1. Determine the type of secondary reinforcer to be used (tokens, poker chips, points, stickers, popsicle sticks, etc.).
2. Have the student or class list desired activities that could be earned.
3. Determine the cost to be assigned to each activity.
4. Display the list of activities and their costs. For some students, the list should be displayed publicly, but other students may prefer privacy.
5. Dispense tokens frequently for occurrences of desired behavior. Students need to begin by earning enough tokens to make them believe in the system.
6. Remove tokens for inappropriate behavior.
7. Determine when tokens can be cashed in for rewards.
8. Periodically change the list of activities to ensure that they remain reinforcing to the student.
9. Permit the student a choice of rewarding activities.

10. Consider "surprise" rewards that are presented in sealed envelopes, inside balloons that must be popped to get the name of the reward, in "secret code," and so on.
11. Keep rewards simple and affordable. Younger students are often motivated to work for coveted classroom "jobs." A teacher may be surprised by the number of students who will work to earn an extra trip to the library, the opportunity to go to the principal for praise, the privilege of helping another teacher or custodian, or extra computer time. Many students are motivated to work for a "pass" that can be used to excuse them from a homework assignment. *Reinforcement systems that require an inordinate amount of additional time, energy, or money from the teacher are unlikely to be applied consistently and will increase the frustration level of teacher and students.*

Use Contingency Contracts

1. Prepare a supply of blank contracts. Each contract should include the following:
    - the name of the student
    - the date negotiated
    - a description of the specific desired behavior
    - a description of the specific rewards to be gained
    - a description of the response cost for contract failure
    - a description of the adult's responsibilities, if any
    - a review date
    - the signatures of the student and adult negotiating the contract.
2. Renegotiate contracts after completion of a previous contract.
3. Renegotiate contracts if the student fails to change behavior by the review date.
4. Alter contract specifications as needed to ensure that the student is successful with the majority of contracts.

Use Timeout for Reinforcement

1. Establish a timeout location, or simply designate a location for each timeout. There are some advantages to having a permanent timeout location and some advantages to having a student do his or her timeout "on the spot" in any location that is a little removed from ongoing activity. Older students may do timeout at their desks by putting their heads down on their desks.
2. Determine the target inappropriate behavior and an appropriate alternative behavior.
3. Review the use of timeout with the student.
4. Implement timeout immediately after the undesirable behavior occurs. Initially, it is preferable to specify a time period and use a timer. Later, students may end timeout "when they are ready" or when the teacher says timeout is over. The general guideline for timeouts is 1 minute per year of the student's age. In a classroom, timeouts of only 1 to 3 minutes may be effective with primary students. *The student should correct the inappropriate behavior immediately after leaving timeout.* Timeout should not serve to get the student out of a task he or she was resisting anyway. Timeout is the "cool-down" period, but the rule or direction must be followed after timeout is over.
5. Reward the student for the next desirable behavior after correcting for the inappropriate behavior. It is often helpful to have the student engage in repeated "positive

practice," where he or she practices the appropriate behavior and receives verbal praise or tokens for the practice behaviors.

6. Follow the student's premature leaving of timeout with double the amount of time to be spent in timeout, removal from the classroom to the office, or some other previously specified consequence.

   The videotape *1-2-3 MAGIC: Training Your Preschoolers and Preteens To Do What You Want Them To Do!* by Thomas Phelan is recommended for parents and teachers wishing to implement effective timeout procedures. The video is available from the A.D.D. Warehouse, 1-800-233-9273.

7. Encourage the student to evaluate results and to reward or criticize his or her own performance.

8. Teach the student to graph his or her progress toward a specific goal. Without graphing, small increments of progress may go unnoticed by teacher and student.

Additional Suggestions for Teaching Students with ADHD

Following are some suggestions to help teachers select appropriate management and instructional strategies for students diagnosed with or suspected of having ADHD. They are adapted from classroom and clinical experience and are offered as an adjunct to a systematic behavior management program. (Blackman, Westervelt, Stevenson, & Welch, 1991).

1. **Do not expect to *"cure"* the student.** To date, all intervention approaches represent ways of coping with the disorder, not curing it. Behaviors acquired through treatment of any kind are unlikely to generalize to other contexts. A behavior management program that works for one teacher may not be effective with a new teacher. For example, behaviors learned in the classroom may not appear in the cafeteria; learning to take notes in English may not extend to note-taking in history, and so on. The teacher who understands this concept will not abandon an effective program just because it does not work in all places or at all times. Ideally, a behavior management program is gradually faded until the new behaviors are consistent and can be maintained without a special program. It may not be possible to fade the program for the student with ADHD.

2. **Reinforce the positive.** Students with ADHD live in a world of reprimands. They need to hear what they are doing right. Appropriate behavior may be rare, but it is important for the teacher to attend to it.

3. **An ounce of prevention is worth a pound of cure.** Teacher proximity will prevent many interactions from escalating into conflict. It is more efficient for the teacher to spend his or her time anticipating and preventing problems than reacting to them. A teacher who walks quietly toward a student may diminish problems, when calling that student's name may escalate the undesirable behavior.

4. **Stay one step ahead of the student.** Some students satiate to reinforcers rapidly. Teachers need to be alert for indications that the student is getting tired of the rewards or losing interest in the chart. Minor changes in the program may be sufficient to recapture the student's interest if the teacher initiates the changes in time.

5. **Use charts and graphs to record progress.** This provides a visual record to remind the student of the goal and help him or her recognize progress. It also facilitates date collection for the teacher. This is important because smaller increments of behavioral change may go unnoticed if records are not kept. A student who improves from attending to a 10-minute activity to attending to a 20-minute activity has made a 100% gain. If the rest of the students can attend for 45 minutes, neither the student nor the teacher is likely to celebrate the progress in the absence of records that draw it to their attention.

6. **Pick your battles.** It will not be possible to make the student with ADHD behave like everyone else. Teachers should focus on eliminating disruptive and aggressive behavior as much as possible and tolerating a higher activity level and shorter attention span than they consider to be desirable. To do otherwise will involve the teacher in constant ineffective nagging, which is likely to increase the student's behavior problems.

7. **Apply immediate consequences for behaviors that cannot be ignored.** It is important for the adult to remain calm to minimize the chances of turning the incident into a power struggle. Literally counting to 10 or taking several deep breaths may help the teacher to respond calmly. Consequences for undesirable behavior should have been discussed with the students and posted before they are implemented. Use redirection and provision of acceptable alternative responses instead of punishment whenever possible.

8. **Do not ask or encourage the student to promise to behave.** Students with ADHD typically break the rules because they have poor impulse control, not because they have not learned the rules. Adding promise-breaking to the list of sins serves no purpose. Help students to plan, not promise.

9. **Walk awhile in the student's shoes.** Adults typically are frustrated by the inconsistency of the student's behavior. Comments such as "but I know he can do it, he did it yesterday" are common. Teachers begin to perceive misbehavior as deliberate when they believe the student knows better. It is helpful for adults to remember how difficult it is to change their own behavior. Recalling New Year's resolutions, diets, and efforts to stop smoking may be helpful. Behavioral change is hard! The more teachers remember this, the more empathy they will have for all their students.

10. **Forgive the student, the parents, and yourself.** It is hard to be a student with ADHD, it is hard to parent one, and it is hard to teach one. Even the best-designed program will not work all the time. The student will misbehave, the parent will forget to follow through on the home component, the teacher will lose his or her temper, and so on. Everyone must be willing to forgive and start over. It is especially important for the student to see adults make mistakes, admit to them, and continue to work toward the goal.

REFERENCES

MODULE III

Effective Classroom Interventions

Blackman, J. A., Westervelt, V. D., Stevenson, R., & Welch, A. (1991). Management of preschool children with attention deficit/hyperactivity disorder. *Topics in Early Childhood Special Education, 11* (2), 91-104.

Cazden, C. B. (1976). How knowledge about language helps the classroom teacher—or does it?: A personal account, *Urban Review, 9*, 74.

This article is the source of the Navajo and Apache childrens' poems in the text.

Jones, F. H. (1987a). *Positive classroom instruction.* New York: McGraw-Hill.

A follow-up to Positive Classroom Discipline, *this text stresses the close relationship between discipline and instruction. Jones explores teacher instructional behaviors that foster student dependency and/or inappropriate behaviors. He then provides specific advice regarding alternative teacher behaviors. Teachers from kindergarten to high school will find practical suggestions that can be applied in a variety of classroom settings.*

SUGGESTED READING

MODULE III

Effective Classroom Interventions

Archer, A., & Gleason, M. (1990). *Skills for school success.* North Billerica, MA: Curriculum Associates.

This program is recommended for its effectiveness in teaching critical organizational and study skills.

Barkley, R. A. (1990). *Attention deficit/hyperactivity disorder: A handbook for diagnosis and treatment.* New York: The Guilford Press.

This is an excellent reference book for a wide variety of research and practical information regarding ADHD.

Copeland, E. D. (1991). *Attention please: a comprehensive guide for successfully parenting children with attention disorders and hyperactivity.* Atlanta, GA: SPI Press.

A comprehensive book for parents who are seeking information about characteristics and causes of attention disorders as well as practical suggestions for parenting strategies.

Copeland, E. D., and Love, V. L. (1990). *Attention without tension: A teacher's handbook on attention deficit disorders.* Atlanta, GA: 3 C's of Childhood, Inc.

This handbook includes a concise overview of characteristics and causes of ADHD, but focuses on effective academic and behavioral classroom interventions. It includes numerous reproducible masters to assist in designing behavior management programs.

Council for Exceptional Children's Task Force on Children with Attention Deficit Disorder (1992). *Children with ADD: A shared responsibility.* Reston, VA: The Council for Exceptional Children.

This is a small, relatively inexpensive publication that is a useful resource for parents and teachers.

Faber, A., & Mazlish, E. (1980). *How to talk so kids will listen and listen so kids will talk.* New York: Avon Books.

This inexpensive paperback will help parents and teachers to rephrase the language they use so that students will be more likely to listen and less likely to feel attacked or "put down." Faber and Mazlish provide many practical suggestions for common scenarios involving students from preschool to high school.

Fowler, M. C. (1990). *Maybe you know my kid: A parent's guide to understanding and helping your child with attention deficit/hyperactivity disorder.* New York: Carol Publishing Group.

Ms. Fowler is a parent who shares her own experiences and those of other parents with children with ADHD. She also provides information about the disorder and offers advice to parents.

Fowler, M. C. (1992). *CH.A.D.D educators manual.* Caset Associated, Ltd. 10201 Lee Highway, #180, Fairfax, VA 22030.

This is an excellent, inexpensive handbook for teachers.

Jenson, W. R., Rhode, G., & Reavis, H. K. (1994-95). *The tough kid tool box.* West Longmont, CO: Sopris West.

This is a very practical collection of strategies for improving the behavior and work habits of difficult students. The book contains a number of forms that can be copied by the classroom teacher.

Jones, C. B. (1991). *Sourcebook for children with attention deficit disorder: A management guide for early childhood professionals and parents.* Tucson, AZ: Communication Skill Builders.

This is the only currently available book that focuses entirely on early childhood students with ADHD. It contains information regarding the development of attention and strategies for improving attention and behavior that will be invaluable for day-care providers, preschool and kindergarten teachers, and parents of young children.

Jones, C. B. (1994). *Attention deficit disorder: Strategies for school-age children.* Tucson, AZ: Communication Skill Builders.

Clare Jones is an experienced teacher who provides many practical suggestions for teachers of elementary, middle, and high school students. Many of the pages may be reproduced by teachers for classroom use. Many valuable references and resource lists are included.

Jones, F. H. (1987). *Positive classroom discipline.* New York: McGraw-Hill.

This text provides specific suggestions to help general education teachers develop effective classroom discipline. Jones stresses the importance of practices that will be effective for all students without placing an undue burden on the teacher.

LaMeres, C. *The winner's circle: Yes, I can.* P.O. Box 8326, Newport Beach, CA 92658: LaMeres Lifestyles Unlimited, (phone (714)854-2683).

This text is recommended as a source of cooperative learning/self-esteem activities.

Parker, H. C. (1992). *ADAPT: Attention deficit accommodation plan for teaching.* Plantation: FL: Specialty Press.

This program includes both teacher and student planbooks. The teacher planbook helps the teacher to evaluate a student's areas of difficulty and select appropriate intervention strategies. The student planbook helps students plan their assignments and keep track of daily performance. Student planbooks may not be reproduced, but each planbook can be used for 4 to 6 weeks. Planbooks must be purchased for each student using the program.

Parker, H. C. (1988). *The ADD hyperactivity workbook for parents, teachers and kids.* Plantation, FL: Impact Publications.

This large print handbook has practical suggestions and includes charts and stickers. It is a good beginning handbook, especially for parents or teachers with limited time or those who would be overwhelmed by the amount of information in some of the other texts.

Phelan, T. W. (1990). *1-2-3 MAGIC: Training your preschoolers and preteens to do what* you *want!* Carol Stream, IL: Child Management.

Although the original focus of the 1-2-3 MAGIC program was toward parents, this video contains many classroom adaptable ideas for controlling negative behaviors and encouraging more positive behavioral substitutes.

Reif, S. F. (1993). *How to reach and teach ADD/ADHD children*. West Nyack, NY: The Center for Applied Research in Education.

This excellent collection of practical suggestions was written by an experienced classroom teacher. Brief interviews with children and adults with ADHD add to the readability of the book.

Rhode, G., Jenson, W. R., & Reavis, H. K. (1992-95). *The tough kid book: Practical classroom management strategies*. West Longmont, CO: Sopris.

Rooney, K. (1988). *Independent strategies for efficient study*. Richmond, VA: J.R. Enterprises.

Ms. Rooney is an experienced teacher and educational consultant who shares a variety of practical study strategies.

Walker, R. A. (In press.) *Teaching the children of the next millennium: Classroom strategies for students with ADHD/ADD, LD, and just about everyone else*. In press. For further information contact Walker Educational Consulting, 6372 Chesla Drive, Gainesville, GA 30504.

This handbook details more than 100 real-world classroom strategies for improving academic mastery in a variety of subject areas from preschool to secondary level. Each strategy has been extensively classroom-tested and includes a list of materials needed and cost involved.

Many other sources of information regarding attention deficit disorder are available from the A.D.D. Warehouse, 300 Northwest 70th Avenue, Suite 102, Plantation, FL 33317. Call 1-800-233-9273 or fax: 1-305-792-8545.

The October/November 1993 issue of *Exceptional Children* is a special issue—*Issues in the education of children with attention deficit disorder.*

The August 1994 issue of *Topics in language disorders* is titled *ADD and its relationships to spoken and written language*.

Parents and teachers may also want to consider joining CH.A.D.D.:

Children and Adults with Attention Deficit Disorders (CH.A.D.D.)
499 N.W. 70th Avenue, Suite 109
Plantation, FL 33317
phone (305) 587-3700
fax (305) 587-4599

CH.A.D.D. has chapters throughout the United States and Canada. Members receive a regular newsletter and CH.A.D.D.'s magazine, *Attention!* featuring the latest developments in ADD research, diagnosis, and treatment.

DISCUSSION QUESTIONS

MODULE III

Effective Classroom Interventions

1. What should teachers know about effective classroom interventions for students with ADHD?
2. Describe some behavioral interventions. How might these help students with ADHD?
3. Describe some successful academic interventions. How might these help students with ADHD?
4. Reflecting on your own school or classroom setting, what specific strategies can be used to increase multisensory teaching and learning?
5. Discuss several strategies for modifying workload and/or time limits while still meeting realistic grading criteria.

Everyone Participates in This Class

Using Response Cards to Increase Active Student Response

Anika had raised her hand for the last time. She'd wanted to answer several of her teacher's questions, especially the one about the clouds that look like wispy, spun cotton. She had not been called on once, even though she had volunteered several times. Anika tried to follow along, but after awhile she lost interest and laid her head on her desk.

Dean did get called on once, but he didn't raise his hand too often. It was much easier to just sit there. He thought if he could just be quiet and still like Anika, then he wouldn't have to think about learning all this weather stuff. Then it got too hard to just sit and be quiet, so Dean found some marbles in his pocket and began to roll them around on his desk. This got his teacher's attention several times.

"Dean, please pay attention."

"Stop that, Dean!"

"Dean, how do you expect to learn this material for tomorrow's test if you don't pay attention?"

The next day, to no one's surprise, Anika and Dean did poorly on the meteorology test. As with other students with long histories of poor school achievement, their teachers sometimes used terms like inattentiveness, slow learner, attention deficit disorder, learning disabilities, and behavioral disorders to "explain" Anika and Dean's lack of academic success. But another explanation for the two students' poor test scores is also possible. Perhaps their low scores—as well as their chronic underachievement in school—were directly influenced by the instruction they typically received.

Neither Anika nor Dean had had an opportunity to actively participate in the previous day's lesson. Instead of being active learners making frequent responses to the lesson's content, both students had been, at best, passive observers. Had the teacher designed the lesson to provide every student with frequent opportunities to respond to the content, Anika, Dean, their classmates, and their teacher would all have benefited (see box, "Benefits of Increasing Active Student Response").

Though most teachers recognize the importance of active student participation, it can be difficult to accomplish during group instruction. A common strategy used by teachers to obtain student participation during group instruction is to pose a question or problem to the entire class and then call on one student to answer. This provides an active learning opportunity for only the student who is called on and often results in more frequent responses by high-achieving students and few or no responses by low-achieving students (Maheady, Mallete, Harper, & Saca, 1991).

There are several alternatives to the one-student-at-a-time method of student participation. Choral responding—each student in the group or class responding orally in unison—is an easy and proven method for increasing active student responding (ASR) during group instruction (Heward, Courson, & Narayan, 1989; Sainato, Strain, & Lyon, 1987; Sindelar, Bursuck, & Halle, 1986). Response cards offer another alternative. This article describes several types of response cards and shows how to use them to engage *all* students in lessons and class discussions.

Using Response Cards

Response cards are cards, signs, or items (such as felt boards) that are simultaneously held up by all students in the class to display their responses to questions or problems presented by the teacher. Not only do response cards enable every student to respond to each question or item, but students can learn by watching others. With response cards, the teacher can easily detect the responses of individual students, which can be difficult with choral responding. Response cards can take many forms, including preprinted and write-on cards.

Preprinted Response Cards

When using *preprinted response cards*, each student selects from a personal set of cards the one with the answer he or she wishes to display. Examples of preprinted cards include Yes/True and No/False cards, colors, traffic signs, planets, science terms, punctuation marks, and concepts such as cause and effect or before and after (see Photo 1).

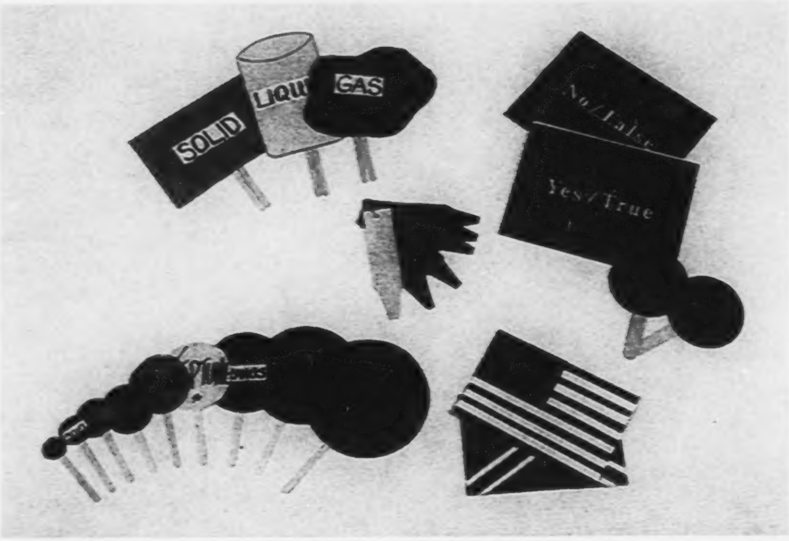


Photo 1. Preprinted response cards can be developed for any curriculum area or lesson content.

Another type of preprinted response card is the "pinch card." Instead of a set of different cards, each student is given a single preprinted card with multiple answers (e.g., a card with clearly marked sections for math operations or the parts of an orchestra). The student simply holds up the card with thumb and forefinger "pinching" the part of the card displaying his or her answer. Brightly colored plastic clothespins and Velcro-backed cutouts or markers (for felt boards) make excellent "pinching" tools; students simply clip the pin or attach the marker to the selected part of the response card and hold the cards overhead (see Photo 2).

Preprinted cards may also have a built-in, movable device for displaying answers, such as a cardboard clock with movable hour and minute hands, or a wheel and a pointer for choosing and displaying answers (e.g., parts of speech).

Preprinted response cards have several advantages:

- They produce high rates of ASR.
- Instruction can begin with few errors by beginning with only two cards and adding more cards as students' repertoires develop.
- They are easier for the teacher to see than write-on response cards.

Possible disadvantages of preprinted response cards:

- Students are limited to the responses printed on the cards.
- Instruction is limited to recognition tasks.
- They are not appropriate for lessons with a large number of different answers (e.g., 50 states, elements of the periodic table).

Write-on Response Cards

When using *write-on response cards*, students mark or write their answers to each instructional item on blank cards or boards that are erased between each question-and-answer trial (see Photo 3).

It's easy to make write-on response cards for each student. To obtain a set of 40 durable write-on response cards, purchase a 4- by 8-foot sheet of white laminated "bathroom board" carried by most builders' supply stores or lumberyards. The cost is generally less than $20, including the charge for cutting the sheet into individual 9- by 12-inch response cards. You can find suitable marking pens at most office and art supply stores. Use "dry erase" markers (one good brand is EXPO) or "China markers." Paper towels or facial tissues will easily wipe clear the dry erase markers. If you use China markers, a bit more "elbow grease" is required to erase answers; old cloth towels work best.

Small chalkboards can be used as write-on response cards, but students' responses may be difficult to see in a full-size classroom.

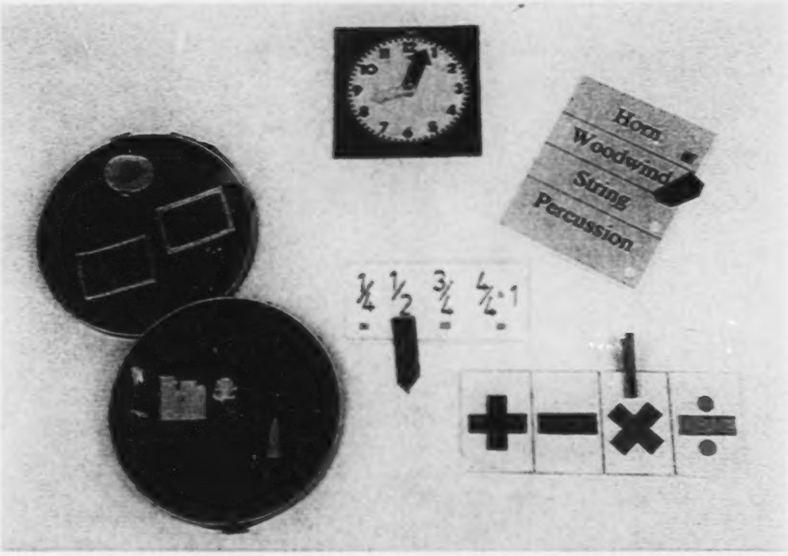


Photo 2. The movable parts on these response cards let students select or create different answers.

Write-on response cards can also be custom-made to provide an organizing structure or background for students' responses. For example, music students might mark notes on a response card that has permanent treble and bass clef scales. Students in a driver's education class could draw where their car should go on response cards that have various traffic patterns and street intersections shown as permanent backgrounds (Hoagland, 1983).

Berg (1994) created an effective type of "write-on" response card for teaching relational concepts (e.g., on, beside, after) to preschool children with developmental delays (see Photo 2). In response to teacher-posed directions or questions (e.g., "Put your fish *next to* the castle"), each child placed a small Velcro-backed marker (e.g., a little yellow fish) on various places within the background scene on his or her felt response card (e.g., a goldfish bowl with a castle and plant inside).

Potential advantages of write-on response cards include:

- Curriculum content and questions for which there are multiple correct answers can be used (e.g., *Q:* What is an alternative energy source to coal-generated electricity? *A:* Solar/Nuclear/Geothermal/etc.).
- Students are not limited to predetermined answers and can give creative responses.
- A more demanding recall-type response is required, rather than the simpler recognition-type response used with preprinted response cards.
- Spelling can be incorporated into the lesson.

Possible disadvantages of write-on response cards are:

- Write-on cards have a lower ASR rate compared to preprinted response cards because of the time needed for writing and erasing answers.
- Error rates are likely to be higher than with preprinted response cards.
- Variations in the size and legibility of students' writing can make their responses difficult for the teacher to see.

Evaluating Response Cards

Response cards have been developed and evaluated through an ongoing series of studies in general and special education classrooms. Several of these studies have compared response cards to hand-raising and one-student-at-a-time recitation, the most commonly used method of student participation during whole-class instruction.

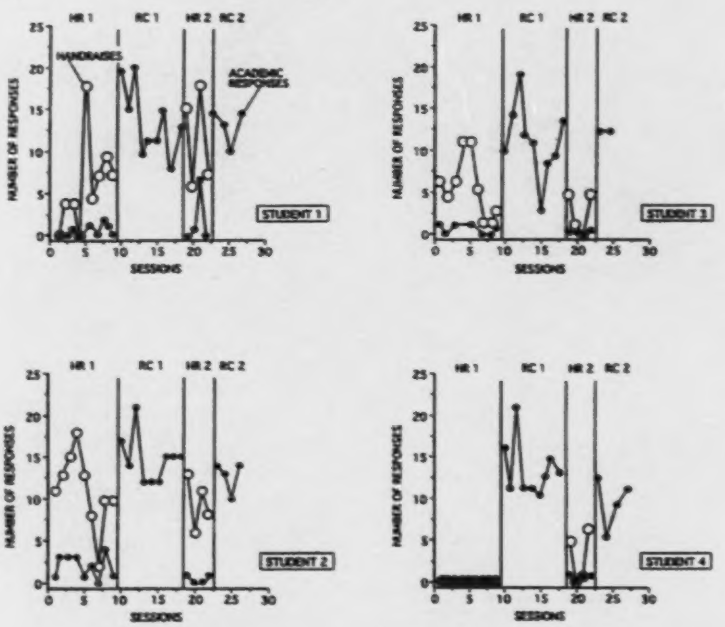
For example, Gardner, Heward, and Grossi (1994) compared write-on cards with hand raising during science lessons in an inner-city, fifth-grade classroom. *Students responded to teacher-posed questions an average of 21.8 times per 30-minute lesson when response cards were used, but made only 1.5 responses per lesson when the teacher called on individual students to answer.* (Look at Figure 1 and think of Student 3 as Anika and Student 4 as Dean.)

The higher participation rate achieved with response cards takes on additional significance when its cumulative effect over the course of a 180-day school year is calculated. Based on the results of this study, *if response cards were used instead of hand raising for just 30 minutes per day, each student would make more than 3,700 additional academic responses during the school year.*

Photo 3. With write-on response cards, each student in the class can answer every question the teacher asks about the story the students have just read.

All 22 students in the class scored higher on next-day quizzes and on 2-week review tests following lessons taught with response cards than they did on quizzes and tests covering lessons where students raised their hands to respond. In addition, most of the students preferred response cards and said they were "fun" to use and helped them learn more. This pattern of results—*much higher ASR rates, improved test scores, and student preference for response cards*—has been replicated in several other studies in elementary, middle, and secondary classrooms (see Heward [1994] for a review).

FIGURE 1. Comparison of Four Students' Responses with and Without Response Cards



Note: The four graphs show the number of academic responses to teacher-posed questions and hand raises by four academically at-risk fifth-grade students during whole-class science lessons in which students participated by hand raising (HR) or response cards (RC).

Source: From "Effects of Response Cards on Student Participation and Academic Achievement: A Systematic Replication with Inner-city Students During Whole-class Science Instruction" by R. Gardner, III, W. L. Heward, & T. A. Grossi. *Journal of Applied Behavior Analysis*, 1994, Vol. 27, p. 67. Reprinted by permission.

Suggestions for Using Response Cards in the Classroom

You can adapt and incorporate response-card activities in many ways to best meet your instructional objectives and fit your students' current levels of performance. For example, students might use write-on response cards to display their answers as the teacher demonstrates how to solve a new type of math or geometry problem. During a language arts lesson, students might select and hold up preprinted response cards showing parts of speech (e.g., noun, verb, preposition) as their teacher points to various words in a projected sentence. When the students consistently recognize parts of speech, their teacher can switch to write-on response cards, elevating the lesson to a higher level of knowledge that requires students to recall each part of speech. Response cards might be used during the last 5 minutes of the period in a high school science class to review the day's lesson (Cavanaugh, Heward, & Donelson, 1995).

Response cards are likely to be more effective when used to give students many active responses within a short period of time (e.g., 5 to 10 minutes) than if used for single responses sporadically during the class period. You can combine the use of response cards with other high-ASR strategies to create a learning environment in which students actively participate and receive feedback for those responses throughout the school day or class period. For example, a science teacher at the secondary level might incorporate choral responding, guided notes, hands-on laboratory activities, response cards, and time trials within a 50-minute class period like this:

> (1) the lesson begins with 3 to 5 minutes' of choral responding in which students "warm-up" for the day's lesson by reviewing concepts they have been learning; (2) students then complete guided notes during a 15-minute lecture or demonstration by the teacher; (3) for the next 20 minutes, small groups of students perform hands-on laboratory experiments, perhaps filling-in a structured worksheet with key procedural steps, results, and observations; and (4) on some days response cards are used during the last 5 minutes of the period to review the day's lesson, whereas on other days the period ends with two 1-minute time trials as a maintenance and fluency-building activity for concepts learned in previous lessons. The actual time spent with each activity would, of course, vary from day to day, and 5 minutes are left unscheduled to allow for transition time. (Heward, 1994, p. 312)

General Suggestions for Using Response Cards

Based on anecdotal observations and the empirical results of the classroom evaluations of response cards conducted to date, we can offer the following suggestions:

- Model several question-and-answer trials, giving students practice on how to use the response cards.

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MORE LEARNING

A large and growing body of educational research on the relationship between student participation and academic achievement has made one finding very clear: *Students who respond actively and often to ongoing instruction learn more than students who passively attend.* (For reviews of this research, see Fisher and Berliner [1985] and Greenwood, Delquadri, and Hall [1984]). Active student response (ASR) is a direct measure of student participation in the classroom. ASR occurs each time a student makes an observable response to ongoing instruction.

> The kinds of responses that qualify [as ASR] are as varied as the kinds of lessons that are taught. Depending upon the instructional objective, examples of ASR include words read, problems answered, boards cut, test tubes measured, praise and supportive comments spoken, notes or scales played, stitches sewn, sentences written, workbook questions answered, and fastballs pitched. The basic measure of how much ASR a student receives is a frequency count of the number of academic responses emitted within a given period of instruction. (Heward, 1994, p. 288)

All things being equal, a high-ASR lesson will produce better achievement than one in which students make few active responses to the lesson's content.

INCREASED ON-TASK BEHAVIOR

Several studies have found increased levels of on-task behavior and reduced off-task or disruptive behavior as correlates or functional outcomes of increased ASR (e.g., Carnine, 1976; Miller, Hall, & Heward, 1995; Sainato, Strain, & Lyon, 1987). On-task behavior is a weak correlate of learning and should not be the primary goal of any intervention designed to increase achievement. A student can be perfectly on-task yet make no meaningful responses to the lesson. However, increasing the degree to which students pay attention and do not disrupt others during instruction has some important advantages:

- The on-task student is more likely to see and hear important instruction than the student who is off-task or disruptive.
- Peers are better able to see and hear instruction when a student's disruptive behavior is reduced.
- Teachers are pleased when their students are well-behaved and are more likely to use instructional strategies associated with increased on-task behavior.

IMMEDIATE FEEDBACK FOR THE TEACHER

Teachers often check the effectiveness of an ongoing lesson by asking students, "Do you understand?" But the feedback provided by this type of check can be misleading. Students will sometimes answer "Yes" when, in fact, they do not understand, because:

- "Yes" answers are greeted with smiles and nice words from the teacher, which serve to reinforce saying "Yes."
- They don't want to admit to not understanding when all of their peers are nodding their heads and seem to understand.
- "Yes" answers avoid aversive consequences from the teacher, such as disappointed looks, recriminating questions, recommendations to "pay better attention" next time, or—worst of all for the whole class—a repeat of the entire demonstration or explanation.
- They don't know they don't understand. Some skills look easy when performed and explained by the teacher; but watching and doing are not the same thing.

When a brave soul does admit to not understanding, the teacher usually probes further to determine *what* the student does not "understand." This probing can be aversive to both teacher and student, perhaps causing the teacher to avoid asking students (at least that student) if they understand and encouraging students to say they understand whether or not they really do.

These potential problems are avoided when ASR occurs frequently throughout a lesson. *ASR provides immediate and ongoing feedback on students' learning, so the teacher never needs to ask, "Do you understand?"* The accuracy and fluency with which students respond help the teacher determine what instructional changes, if any, might be made during the lesson itself in an effort to improve the lesson's effectiveness "on the spot."

When instruction includes high-ASR activities, not only is it hard for students to simply passively attend, it is equally difficult for teachers to avoid direct and frequent feedback on the effectiveness of their teaching. Thus, teachers maintain the "close, continual contact with relevant outcome data" they need to make good instructional decisions (Bushell & Baer, 1994).

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- Maintain a lively pace throughout the response cards portion of the lesson (i.e., keep the intervals between trials short [Carnine, 1976]).
- Provide clear cues when students are to hold up and put down their cards (e.g., "Cards up"; "Cards down").
- Provide feedback based on the "majority response" (Heward et al., 1989). When you see only correct responses, provide a quick and positive comment (e.g., "Great!" "You're right!") and present the next item or question. When you see just a few incorrect responses, state or point out the correct answer (e.g., "Yes, the word 'barn' is the predicate noun in that sentence").
- When a significant number of incorrect responses are displayed—perhaps a fourth or more of the class—state or display the correct answer and immediately repeat the same question or item. Check the effectiveness of corrective feedback by repeating, several trials later, any item for which you saw incorrect responses.
- Remember that students can benefit and learn from watching others. Don't let students think it's cheating to look at classmates' response cards.

Specific Suggestions for Using Preprinted Response Cards

- Design and construct the cards to be durable and as easy to see as possible (e.g., consider size, print type, color codes).
- Make the cards easy for students to manipulate and display (e.g., put answers on both sides of the cards so students can see what they are showing the teacher, attach a group of related cards to a ring).
- Begin instruction on new content with a small set of fact/concept cards (perhaps only 2), gradually adding additional cards as students' skills improve.

Specific Suggestions for Using Write-on Response Cards

- Limit language-based responses to 1 or 2 words.
- Keep a few extra marking pens on hand, and remind students to cap them tightly when the lesson is over.
- Be sure students do not hesitate to respond because they are concerned about making spelling mistakes. You might use one or a combination of these strategies: (a) provide several practice trials with new words or terms before the lesson begins; (b) write new words or important technical terms on the chalkboard or an overhead projector and tell students to refer to them as needed during the lesson; or (c) use the "don't worry" technique—tell students to try their best but that misspellings won't be counted against them.
- Students enjoy doodling on their response cards. Let students draw on the cards for a few minutes after a good lesson.

A Final Note

Providing students with frequent opportunities to respond is one of the most powerful means teachers have for increasing academic achievement. Not only are the outcomes of increasing active student responding significant, but the means for providing these opportunities are currently available to the practitioner. Active student responding is neither a hard-to-pin-down hypothetical construct nor a variable, such as socioeconomic status, on which the teacher can hope to have little or no effect. *ASR is, as Bloom (1980) put it, an "alterable variable"—one that both makes a difference and can be affected by teaching practices.* Response cards provide a proven, easy-to-implement, low-cost, and effective strategy for increasing ASR.

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MODULE IV

POLICY AND ADMINISTRATIVE ISSUES

Administration and Operation of Programs and Services for Students with Attention Deficit/Hyperactivity Disorder (ADHD)

This module deals with administrative and policy issues concerning programs and services for students with ADHD. Specifically, the module focuses on the following issues:

- Legal provisions of federal law regarding the provision of services for students with attention deficit disorder.
- Recent advocacy and interest in children with attention deficit disorder.
- Legal precedents related to provision of programs and services for students with attention deficit disorder.
- Construct for administrative response to federal legal requirements and the policy clarification of the U.S. Department of Education.
- Examples of state and local policy options pertaining to administration of programs and services for students with disabilities.
- Administrative and programmatic issues involved in provision of programs and services for children with attention deficit disorder.
- Unresolved administrative issues.

Throughout this module, there is an overall assumption that the responsibility for meeting the educational needs of children with ADHD does not belong to any one educational program (special or general education)—but to the educational system as a whole. If the needs of children with ADHD are to be fully met in the schools, increased collaboration, coordination, and consultation will have to occur among administrators, regular educators, special educators, related service personnel, other support program educators such as Title 1, Elementary and Secondary Education Act (ESEA), and parents.

Developing a school-wide approach to serving children with ADHD should be a part of overall school restructuring efforts and initiatives for all students, including those with disabilities.

Recent Advocacy and Interest in Children with ADHD

Figure IV-1 shows the relationship of students with attention difficulties to other students in the classroom. As can be seen by the diagram in this chart, it is assumed that there is a group of students with disabilities that qualify for both Section 504 of the Rehabilitation Act of 1973 (hereafter abbreviated Section 504) and The Individuals with Disabilities Education Act (hereafter abbreviated IDEA). There is another group of students that may be eligible for Section 504, but who do not qualify for services under IDEA. Finally, there is a broader group of students with attention problems that may require adaptations in the general education program, but who do not qualify for either Section 504 or IDEA.

Figure IV-1 **Student Population**

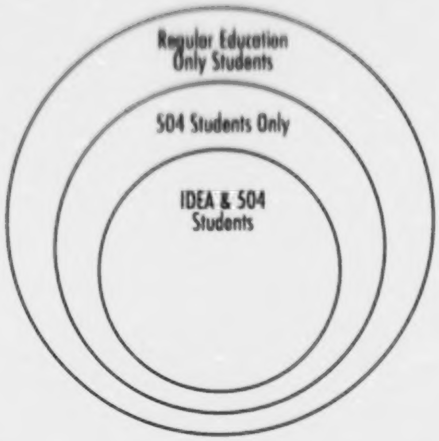

Diagram reprinted with permission, Council of Administrators of Special Education (1992). *Student access: A resource guide for educators.* Albuquerque, NM: Author.

Although the range of students with attention deficit disorder in need of specially designed instruction varies depending on the study or setting observed, there has been increased interest and concern in this population of students during the past several years. Two national organizations, Children with Attention Deficit Disorder (CH.A.D.D.) and the Attention Deficit Disorder Association (ADDA), representing parents, educators, medical personnel, and other professional personnel, have been formed. During the hearings and discussions at the time of the 1990 reauthorization of the Education of the Handicapped Act, CH.A.D.D. and ADDA were very active in their advocacy for the addition of a separate category of disability, ADD/ADHD. This spirited debate revealed a number of concerns by parents and educators regarding the extent to which children with ADD/ADHD were being served. The search for resolution of these issues resulted in the 101st Congress ordering the Secretary of Education in the U.S. Department of Education to issue a Notice of Inquiry (NOI) in the Federal Register in order to obtain a broad range of information regarding existing and needed services for this population of students.

This Notice of Inquiry (NOI) was published November 29, 1990—with a deadline for public comment on or before March 28, 1991. When the U.S. Department of Education staff analyzed the 1,068 comments they received in response to this NOI, there were four themes:

- First, the comments indicated there was confusion in the field regarding if and how children with ADHD can become eligible to receive special education and related services. The position of the U.S. Department of Education has been and continues to be that children with ADHD who are in need of special education and related services can be eligible under other existing eligibility categories such as specific learning disabilities, serious emotional disturbance, and other health impaired.

- The second theme of the NOI comments concerned confusion in the field about school district obligations to evaluate and identify students with ADHD. A number of individuals who sent in comments indicated that some school districts do not further evaluate children if there is a medical diagnosis of ADHD, and that ADHD was a medical condition, not an educational condition.
- The third theme in the NOI reflected a lack of awareness of the needs of children with ADHD and effective educational strategies and solutions.
- Finally, and closely related, the comments reflected a need for training school principals and classroom teachers, as well as parents, regarding the needs of children with ADHD and effective strategies to educate these children.

Based on these public comment themes and a growing number of complaints filed with the Office of Civil Rights, the U.S. Department of Education published a memorandum on September 16, 1991, for the purpose of clarifying existing federal policies. This memorandum was signed by three Assistant Secretaries within the Department of Education—the Office of Special Education and Rehabilitative Services, the Office of Civil Rights, and the Office of Elementary and Secondary Education. This memorandum clarified existing policy, rather than establishing new policy regarding the legal responsibilities of states and school districts set forth by Part B, IDEA, and Section 504 of the Rehabilitative Act. These policy clarifications are reflected in Table IV-1. An important message of this joint memorandum is that school district responsibility to serve children with ADHD cuts across special and general education.

Legal Provisions of Services for Students with ADHD

The Americans With Disabilities Act of 1990 (ADA), Section 504 of the Rehabilitation Act of 1973, and the Individuals with Disabilities Education Act (IDEA) all have requirements relating to the provision of educational programs and services for students with ADHD and their families. In order to effectively administer and manage programs and services for students with ADHD, it is important to understand the similarities and differences in the provisions of these three federal laws. Table IV-1 provides a comparison of the requirements of each of these three federal laws. Portions of Table IV-1 were taken and/or adapted from the resource manual published by CASE, the Council of Administrators of Special Education, Inc. (1992), which provided a comparison of IDEA and Section 504 legal provisions. The provisions of the ADA have been added in Table IV-1 by the author.

Table IV-1 Comparison of the Requirements of IDEA, Section 504, and ADA Regarding the Provision of Services for Students with ADHD

IDEA	Section 504	ADA
COMPONENT: General Purpose		
A federal funding statute whose purpose is to provide financial aid to the states in their efforts to ensure adequate and appropriate services for disabled children.	A broad civil rights law which protects the rights of individuals with handicaps in programs and activities that receive federal financial assistance from the U.S. Department of Education.	A federal statute that imposes two requirements on businesses and other entities subject to its coverage. First, ADA prohibits such entities from discriminating against persons with disabilities with respect to job application procedures, hiring, discharge, compensation, advancement, job training and any other terms, conditions, and privileges of employment. Second, it requires covered entities to "reasonably accommodate" individuals who are protected by the Act.

NOTES: Table adapted from Council of Administrators of Special Education (1992). *Student access: A resource guide for educators.* Albuquerque, NM: Author.

Section 504 was written in 1973 and uses the terms "handicapped person, handicaps, handicapping condition," and so on. However, the preferred terminology is reflected in IDEA.

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Who is eligible?		
All children ages 3-21 who are determined to be eligible within one or more disability categories and who need special education and related services. Children with ADHD may qualify for special education and related services under the "other health impaired" category. In addition, they may also be eligible for services under Part B if they satisfy the criteria of another disability category such as learning disabilities or serious emotional disturbance.	All school-age children who meet the definition of qualified handicapped person, that is, (1) has or (2) has had a physical or mental impairment which substantially limits a major life activity or (3) is regarded as handicapped by others. Major life activities include walking, seeing, hearing, speaking, breathing, learning, working, caring for oneself, and performing manual tasks. The handicapping condition need only substantially limit one major life activity in order for the student to be eligible.	The ADA has a broad definition of disability. An individual with a disability is defined as one who: (1) has a physical or mental impairment that substantially limits one or more life activities of such person: or (2) has a record of such impairment; or (3) is regarded as having such impairment. The definition of disabilities is similar to the definition of handicapped used in Section 504. It is likely that most persons with ADHD are considered disabled for ADA coverage purposes.

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Responsibility to Provide a Free Appropriate Public Education (FAPE)		
Both IDEA and Section 504 require the provision of a free appropriate public education to eligible students covered under them, including individually designed instruction. An Individual Education Program (IEP) must be developed for each student who is eligible for special education. An IEP details the specially designed instruction and related services to be provided. Requires a written IEP document with specific content and required number of specific participants at the IEP meeting. "Appropriate education" means a program designed to provide "educational benefit." Related services are provided if required for the student to benefit from specially designed instruction.	Both IDEA and Section 504 require the provision of a free appropriate public education to eligible students covered under them including individually designed instruction. The Individual Education Program (IEP) of IDEA may be used for the Section 504 written plan, although it is not required. Section 504 does not require a written document, but does require a plan. It is recommended that a group of persons knowledgeable about the student convene and specify the agreed-upon services. "Appropriate" means an education comparable to education provided to nonhandicapped students, requiring that reasonable accommodations be made. Related services, independent of any special education services as defined under IDEA, may be the reasonable accommodation.	ADA does not require the provision of a free appropriate public education to eligible students. The ADA, however, has two provisions that can impact programs and services for eligible students with a disability, including ADHD. Related to obtaining education and related services for eligible handicapped students, including those with ADHD, is two-fold. First, the ADA applies its protections to cover nonsectarian private schools. However, religious organizations and religious entities controlled by religious organizations have no obligations under ADA even when operating otherwise secular activities such as day care, nursing homes, or private schools. Even if such a school is operated by a law board, the program remains exempt from Title III of the Act. Second, the ADA provides an additional layer of protection in combination with actions brought under Section 504 of the Rehabilitation Act of 1973 and/or the IDEA. It seems likely that similar rulings will be made to those under Section 504 for failure of public schools to make reasonable accommodations for students with disabilities, including ADHD. The relief

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Responsibility to Provide a Free Appropriate Public Education (FAPE) (continued)		
		sought under the ADA may be similar to that presently available under Section 504 or the IDEA. Although the ADA does not require the provision of free appropriate public education (FAPE) for eligible students, reasonable accommodations are required for eligible students with a disability, including ADHD, to perform essential functions of the job. Often the special education program is community-based and involves job training and job placement. The ADA's nondiscrimination rules also apply to health insurance and other employer benefits. Accordingly, persons with ADHD and other disabilities may not be expressly excluded from benefit coverage or have special coverage rules applied to them, simply because they are disabled; for example, a maximum lifetime medical cap that is different from those without disabilities.

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Special Education Versus Regular Education		
A student is only eligible to receive IDEA services if the multidisciplinary team determines that the student is disabled under one or more of the specific qualifying disabilities and requires specially designed instruction. Each student must be provided services within the least restrictive environment. Special education and related services included within the IEP must be provided at no cost to parents. In addition, a full continuum of placement alternatives, including the regular classroom, must be available for providing special education and related services required in the IEP.	A student is eligible as long as he or she meets the definition of qualified person. It is not required that the handicap adversely affect education performance, or that the student need special education in order to be protected. The student's education must be provided in the regular classroom unless it is demonstrated that education in the regular environment with the use of supplementary aids and services cannot be achieved satisfactorily. The determination of what services are needed must be made by a group of persons knowledgeable about the student. The decisions about Section 504 eligibility and services must be documented in the student's files and reviewed periodically. Should it be determined that the child with ADHD is handicapped for purposes of Section 504 and needs only adjustments in the regular classroom, those adjustments are required by Section 504. A range of strategies is available to meet the educational needs of children with ADHD. Such services might include modification in the regular classroom, special assistance with an aide, a behavior plan, counseling, and/or monitoring of medication.	The ADA does not address the provision of services within the regular or special education classroom. The public schools, however, must provide reasonable accommodations for students with disabilities, including ADHD, in either the regular or special education classroom.

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Funding		
Provides additional funding for eligible students.	Does not provide additional funds. IDEA funds may not be used to serve children found eligible only under Section 504, except to provide incidental benefits.	Does not provide additional funds.
COMPONENT: Accessibility		
Requires that modifications must be made if necessary to provide access to a free appropriate education.	Has regulations regarding building and program accessibility, requiring that reasonable accommodations be made.	Requires reasonable accommodations for eligible students, including ADHD.
COMPONENT: Procedural Safeguards		
Both IDEA and Section 504 require notice to the parent or guardian with respect to identification, evaluation, and/or placement. IDEA procedures may be used for implementation of Section 504, although they are not required.	Requires written notice prior to any change in placement.	Requires notice only before a "significant change" in placement.
Requires written notice.	Both IDEA and Section 504 require notice to the parent or guardian with respect to identification, evaluation, and/or placement. IDEA procedures may be used for implementation of Section 504, although they are not required.	Does not delineate specific procedural safeguards related to special education.
Delineates required components of written notice.	Does not require written notice; however, it is a good practice.	

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Due Process		
Requires local education agencies (LEAs) to provide impartial due process hearings for parents or guardians who disagree with the identification, evaluation, or placement of a student. Delineates specific requirements.	Requires local education agencies (LEAs) to provide impartial hearings for parents or guardians who disagree with the identification, evaluation, or placement of a student. Requires that the parent have an opportunity to participate and be represented by counsel. Other details are left to the discretion of the LEA. Policy statements should clarify specific details. The due process hearing procedures of IDEA may be used for Section 504, but are not required.	Does not delineate specific due process procedures. Individuals with disabilities have the same remedies that are available under Title VII of the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1991. Thus, an aggrieved applicant or employer must first file a charge with the Equal Employment Opportunity Commission (EEOC) prior to beginning civil litigation. When the administrative remedies are exhausted, the EEOC, the attorney general, or the aggrieved individual may file suit in court.

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Evaluations		
A full, comprehensive evaluation is required, assessing all areas related to the suspected disability. The child is evaluated by a multidisciplinary team or group.	Evaluation draws on information from a variety of sources in the area of concern; decisions made by a group knowledgeable about the student, evaluation data, and placement options.	Does not delineate specific evaluation requirements. However, reasonable accommodations must be provided, such as modifying entrance examinations or providing readers or interpreters.
Requires informed consent before an initial evaluation is conducted.	Does not require consent, only notice. However, good professional practice indicates informed consent.	
Requires reevaluations to be conducted at least every 3 years.	Requires periodic reevaluations. IDEA schedule may be used, but not required.	
A reevaluation is not required before a significant change in placement. However, a review of current evaluation data, including progress monitoring, is good practice.	Reevaluation is required before a significant change in placement.	
Provides for independent educational evaluation at LEA expense if parents disagree with evaluation obtained by school, and hearing officer concurs.	No provision for independent evaluations at district expense. LEA should consider any such evaluations presented.	

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Placement Procedures		
Both IDEA and Section 504 require LEAs when interpreting evaluation data and making placement decisions to: • draw upon information from a variety of sources • assure that all information is documented and considered • ensure that the eligibility decision is made by a group of persons including those who are knowledgeable about the child, the meaning of the evaluation data and placement options • ensure that the student is educated with his/her nondisabled peers to the maximum extent appropriate (least restrictive environment). An IEP meeting is required before any change in placement.	Both IDEA and Section 504 require LEAs when interpreting evaluation data and making placement decisions to: • draw upon information from a variety of sources • assure that all information is documented and considered • ensure that the eligibility decision is made by a group of persons including those who are knowledgeable about the child, the meaning of the evaluation data, and placement options • ensure that the student is educated with his or her nondisabled peers to the maximum extent appropriate (least restrictive environment). A meeting is not required for any change in placement.	No specific placement procedures are required. However, reasonable accommodations are required.

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Grievance Procedure		
Does not require a grievance procedure or a compliance officer. Citizen complaints, however, may be filed with the state education agency (SEA). Secretarial reviews may also be requested.	Requires LEAs with 15 employees to (1) designate an employee to be responsible for assuring LEA compliance with Section 504 and (2) provide a grievance procedure for parents, students, and employees.	Does not require specific grievance procedures related to education.
COMPONENT: Exhaustion		
Requires the parent or guardian to pursue administrative hearing before seeking redress in the courts; compensatory damages possible as well as recovery of attorney fees.	Administrative hearings are not required prior to OCR involvement or court action; compensatory damages possible.	An aggrieved applicant or employer must first file a charge with the Equal Employment Opportunity Commission (EEOC) prior to beginning civil litigation. When the administrative remedies are exhausted, the EEOC, the attorney general, or the aggrieved individual may file suit in court.

Table IV-1 (continued)

IDEA	Section 504	ADA
COMPONENT: Enforcement		
Enforced by the U.S. Department of Education, Office of Special Education Programs. LEA compliance is monitored on a periodic cycle by the State Department of Education and the Office of Special Education Programs, U.S. Department of Education. Potentially, federal funding could be withheld or a payback required should the LEA not be in compliance.	Enforced by the U.S. Department of Education, Office of Civil Rights. Potentially, all federal funding could be withheld should a SEA or LEA not come into compliance.	Individuals with disabilities will have the same remedies that are available under Title VII of the Civil Rights Act, as amended by the Civil Rights Act of 1991 and enforced by the Equal Employment Opportunity Commission and the Department of Justice. The Civil Rights Act of 1991 significantly expanded the procedures and remedies available to individuals charging discrimination under the ADA. Under the ADA, an employer found to have been involved in discrimination could be ordered to discontinue these discriminatory practices, to alter its current practices, to hire a qualified individual with a disability, or to reinstate an individual with back pay and provide him necessary reasonable accommodations. Employers can also be held liable for compensatory and punitive damages, based on a sliding scale. However, punitive damages may be awarded only when it has been demonstrated that the employer engaged in discriminatory practice(s) "with malice or with reckless indifference to the federally protected rights of an aggrieved individual."

DISCUSSION QUESTIONS

MODULE IV

Policy and Administrative Issues

1. What factors impacted the decision not to separate ADHD into its own category under the Individuals with Disabilities Education Act (IDEA)?
2. What federal legislation may impact children with ADHD?

APPENDIX B

WORKSHOP EVALUATION
Attention Deficit Hyperactivity Disorder
Washington, DC ▬ July 21, 1995

Thanks for taking the time to complete this evaluation form.
Your input helps with plans for future activities.

Please provide comments regarding strengths and weaknesses of this module (usefulness, presentation, format, materials, etc.) Include areas in which you would like to see more information developed and how the training may better meet your specific needs.

Please use the reverse side(s), if necessary.

SCALE RATING (5) EXCELLENT TO (1) POOR.

Module I - Characteristics and Identification

Content of module	5	4	3	2	1
Presentation of module	5	4	3	2	1
Support materials for module	5	4	3	2	1
Transferability of content to work setting	5	4	3	2	1

COMMENTS:

Module II - Model School Programs

Content of module	5	4	3	2	1
Presentation of module	5	4	3	2	1
Support materials for module	5	4	3	2	1
Transferability of content to work setting	5	4	3	2	1

COMMENTS:

Module III - Effective Classroom Interventions

Content of module	5	4	3	2	1
Presentation of module	5	4	3	2	1
Support materials for module	5	4	3	2	1
Transferability of content to work setting	5	4	3	2	1

COMMENTS:

Module IV - Policy and Administrative Issues

Content of module	5	4	3	2	1
Presentation of module	5	4	3	2	1
Support materials for module	5	4	3	2	1
Transferability of content to work setting	5	4	3	2	1

COMMENTS:

Would videotapes assist in complementing this training? ☐ yes ☐ no

Please specify what would be beneficial for you to have on videotape ______________________

Participant Demographics

In what state/province do you work? ______________________

Which one of the following best describes your **primary** position?

☐ Administrator
☐ Program Supervisor
☐ Staff Developer
☐ Teacher Education
☐ Paraprofessional
☐ Researcher
☐ Student
☐ ______________________
☐ Parent
☐ Related Services
☐ Teacher

With what grade(s) level do you work? ______________________

What is the size of your school? ______________________

How did you hear about this seminar? ______________________

What professional organizations do you belong to? ______________________

Please leave at seminar, or mail to Betty McCracken, CEC, 1920 Association Drive, Reston, VA 22091-1589.

APPENDIX C

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EXCEPTIONAL CHILDREN

SPECIAL ISSUE:

Issues in the
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Statement of Purpose

Exceptional Children, an official journal of The Council for Exceptional Children, publishes original research on the education and development of exceptional infants, toddlers, children and youth, and articles on professional issues of concern to special educators. The journal welcomes manuscripts reflecting qualitative or quantitative methodologies using group or single-subject research designs. Articles appropriate for publication include data-based research, data-based position papers, research integration papers, and systematic analyses of policy or practice. The journal also includes reports of official actions of the governing bodies of CEC.

Selection of manuscripts is made on the basis of blind peer review of the material submitted for publication (the identity of the author not known to the reviewer). Reviewers evaluate the manuscript for accuracy and validity of the contents, importance of the topics addressed, contribution to the profession, implications for the practice of special education, originality, and quality of writing. Author guidelines are available from the Editor or from CEC headquarters.

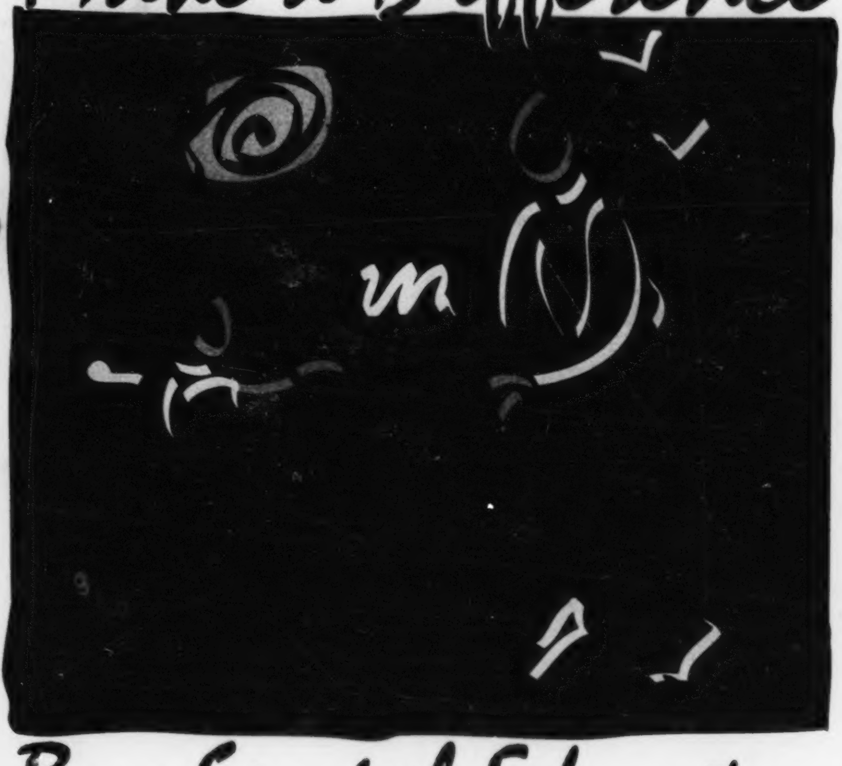
Five copies of all manuscripts should be addressed to the Editor of *Exceptional Children:* Dr. Naomi Zigmond, Professor of Special Education, University of Pittsburgh, 4K37 Forbes Quadrangle, Pittsburgh, PA 15260. Authors should include a cover letter stating that the manuscript has not been previously published and is not currently being considered for publication elsewhere.

APPENDIX D

CEC 1996
Spring Catalog

PRODUCTS AND SERVICES FOR THE SPECIAL EDUCATOR

Make a Difference



Be a Special Educator

BEST COPY AVAILABLE

THE COUNCIL FOR EXCEPTIONAL CHILDREN

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TTY	703-264-9446
Internet	cecpubs@cec.sped.org

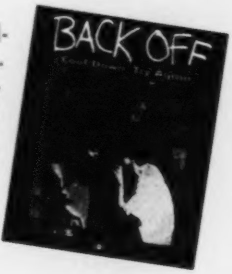
Look for member discounts on most CEC products. Discounts are not available on some products that CEC distributes from federally funded projects or from commercial publishers. Prices on certain curriculum and training packages are not subject to member discounts. Books and other materials distributed through this catalog do not necessarily reflect official positions of CEC.

CEC Logo Products flyers are available upon request.

Prices in effect through August 31, 1996.

Back Off, Cool Down, Try Again: Teaching Students How to Control Aggressive Behavior

Sylvia Rockwell



A vividly descriptive primer on how to nurture the social development of students with aggressive behavior in a classroom setting using the stages of group development as the basis for classroom management. The focus moves from teacher control to control through peer interaction. Strategies for group management, affective and academic instruction, and planning, documentation, and consultation are presented.

#P5120 1995 144pp ISBN 0-86586-263-X
$27 CEC Members **$19**

Crossover Children: A Sourcebook for Helping Children Who Are Gifted and Learning Disabled, Second Edition

Marlene Bireley

CROSSOVER
Sourcebook
Children
Gifted
Learning
Disabled

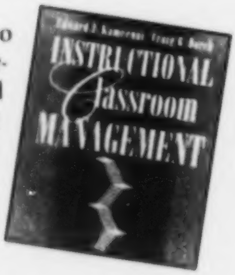
A rich resource that provides specific strategies to help children who are gifted and learning disabled and/or ADD control impulsivity, increase attention, enhance memory, improve social skills, and develop a positive self-concept. It also provides recommendations for academic interventions and enrichment activities.

#P5121 1995 94pp ISBN 0-86586-264-8
$28 CEC Members **$19.60**

Instructional Classroom Management

A Proactive Approach to Behavior Management

Edward J. Kameenui and Craig B. Darch



The primary difference between an instructional approach to classroom management and all other approaches is that before an action or problem occurs, the teacher, carefully and strategically, teaches all that is required so that students will have the information necessary to behave appropriately. The authors offer a 180-day plan or curriculum for teaching appropriate behavior. Teachers will learn how to use effective teaching procedures in social and behavior skills instruction.

#S5126 1995 209pp ISBN 0-8013-0636-1 **$22.40** CEC Members **$20**

Survival Guide for the First-Year Special Education Teacher, Revised

Mary Kemper Cohen, Maureen Gale, and Joyce M. Meyer

Over 20,000 copies distributed!

The *Survival Guide* is the perfect resource for all teachers—special educators, general classroom teachers, and paraprofessionals working in traditional or inclusive school settings. It provides easy-to-use suggestions for organizing classrooms; planning and record keeping; getting lessons ready for substitute teachers; working with parents, administrators, and fellow teachers; building collaborative partnerships; and managing stress.

#P335R 1994 47pp ISBN 0-86586-256-7 **$12** CEC Members **$8.40**

Resourcing: Handbook for Special Education Resource Teachers

Mary Yeomans Jackson

Be prepared to function at your best as a member of a school-based team. *Resourcing* will help you take a leadership role as you work in collaboration with general classroom teachers and other practitioners. Assess your personal readiness for being a resource professional within your school. Includes many useful forms and checklists for conducting meetings and organizing your workday.

#P366 1992 64pp ISBN 0-86586-219-2 **$12** CEC Members **$8.40**

Interventions: Collaborative Planning for Students At Risk

Randall Sprick, Marilyn Sprick, and Mickey Garrison

Practical interventions for managing behavioral, social, and academic problems. Packaged in 16 individual booklets with separate Procedural Manual.

- Managing Physically Dangerous Behavior
- Managing Severely Disruptive Behavior
- Providing Academic Assistance
- Structuring Reinforcement Systems
- Restructuring Self-Talk
- Establishing Classroom Management Strategies
- Increasing Positive Interactions
- Establishing Borderlines and Consequences
- Planning Discussions
- Self-Monitoring
- Mentoring
- Managing Stress
- Teaching Desired Behaviors
- Signal Interference Cueing
- Goal Setting and Contracting
- Self-Control Training

The Procedural Manual provides detailed instructions on how to do collaborative problem-solving.

#S5101 1993 ISBN 0-944584-95-0 **$72** CEC Members **$65**

Tough to Reach, Tough to Teach

Students with Behavior Problems

Sylvia Rockwell

Prepare yourself for those encounters with disruptive, defiant, hostile students by knowing how to defuse undesirable behaviors and structure "face-saving" alternatives. Through a series of vignettes you gain insight into problem behaviors and explore effective management strategies. A valuable resource for both regular and special education teachers.

#P387 1993 106pp ISBN 0-86586-235-4 **$22** CEC Members **$15.40**

Non-Compliance: Four Strategies That Work

Ennio Cipani

Using a variety of vignettes, you are shown how praise and attention, guided practice and reinforcement, "Grandma's rule," and behavioral momentum can be used to change non-compliant behavior and help a child become more cooperative.

#P389 1993 ISBN 0-86586-238-9
$8.90 CEC Members **$6.25**

Disruptive Behavior: Three Techniques to Use in Your Classroom

Ennio Cipani

After examining some of the ramifications of disruptive behavior, you are introduced to three management techniques—catch them being good, behavioral contracting, and the "good behavior game."

#P390 1993 ISBN 0-86586-243-5 **$8.90** CEC Members **$6.25**

Additional resources about teaching students with behavioral problems are listed on pages 4-5.

Teaching Social Skills: A Practical Instructional Approach

Robert Rutherford, Jane Chipman, Samuel DiGangi, and Kathryn Anderson

Interventions to help teachers develop prosocial behavior in students who are withdrawn, immature, or aggressive. The program addresses 23 specific skills. Before selecting an intervention, the teacher must decide whether the student can't or won't behave appropriately.

#S5063 1992 **$79** CEC Members **$71**

CEC'S MINI-LIBRARY

Working with Behavioral Disorders

Edited by Lyndal M. Bullock and Robert B. Rutherford

A whole library in a box. Eight brief, practitioner-oriented books containing practical ideas for working with specific behavioral problems in the classroom. Supplement this mini-library with CEC's other mini-library books.

Order the entire set and save over 10%.
#P346 1991 **$64** CEC Members **$45**

Mini-Library Books may also be ordered individually. **$8.90** *each; CEC Members* **$6.25**

Conduct Disorders and Social Maladjustments: Policies, Politics, and Programming

Frank H. Wood, Christine O. Cheney, Daniel H. Cline, Kristina Sampson, Carl R. Smith, and Eleanor C. Guetzloe

A resource to help you decide whether or not a student with behavioral disorders is eligible for special education.

#P338 27pp ISBN 0-86586-197-8

Behaviorally Disordered? Assessment for Identification and Instruction

Bob Algozzine, Kathy Ruhl, and Roberta Ramsey

Provides specifics on conducting functional assessments and using curriculum-based assessment for making useful instructional decisions. CEC/ERIC

#P339 37pp ISBN 0-86586-198-6

Preparing to Integrate Students with Behavioral Disorders

Robert A. Gable, Virginia K. Laycock & Sharon Maroney, Carl Smith

Helps teachers decide what skills a student needs in a regular classroom. CEC/ERIC

#P340 35pp ISBN 0-86586-199-4

Teaching Young Children with Behavioral Disorders

Mary Kay Zabel

Provides options for structuring the learning environment for young children with behavioral disorders. CEC/ERIC

#P341 25pp ISBN 0-86586-200-1

Teaching Students with Behavioral Disorders: Basic Questions and Answers

Timothy J. Lewis, Juane Heflin, and Samuel A. DiGangi

Answers over 100 questions frequently asked by teachers about students with behavioral problems. CEC/ERIC

#P337 37pp ISBN 0-86586-205-2

Social Skills for Students with Autism

Richard L. Simpson, Brenda Smith Myles, Gary M. Sasso, and Debra M. Kamps

Examines four approaches to promote social skills for children with autism: Direct skill instruction, prompting, peer-initiated, and peer tutoring.

#P343 23pp ISBN 0-86586-202-8

Reducing Undesirable Behaviors

Lewis Polsgrove, Editor

Describes strategies for minimizing undesirable behavior.

#P342 33pp ISBN 0-86586-201-X

Moving On: Transitions for Youth with Behavioral Disorders

Michael Bullis and Robert Gaylord-Ross

Presents suggestions in competitive work settings for youth with behavioral problems. CEC/ERIC

#P345 52pp ISBN 0-86586-204-4

Mini-Library Series on Emotional/Behavioral Disorders

Edited by Lyndal M. Bullock and Robert A. Gable

Order the entire set and save over 10%.
#D5137 1996 **$72** CEC Members **$50.40**
Titles may also be ordered individually. **$11.40** each; *CEC Members* **$8.00**

NEW

Best Practices for Managing Adolescents With Emotional/Behavioral Disorders Within the School Environment

Beverley H. Johns, Eleanor C. Guetzloe, Mitchell Yell, Brenda Scheuermann, Jo Webber, Valerie G. Carr, Carl R. Smith

#D5130 40pp ISBN 0-86586-265-6

Developing a System of Care: Interagency Collaboration for Students with Emotional/Behavioral Disorders

Russell Skiba, Lewis Polsgrove, Karen Nasstrom

#D5131 46pp ISBN 0-86586-266-4

Early Intervention for Young Children At Risk for Emotional/Behavioral Disorders: Implications for Policy and Practice

Wesley Brown, Maureen A. Conroy, James J. Fox, Joseph Wehby, Carol Davis, Mary McEvoy

#D5132 34pp ISBN 0-86586-267-2

Effective Strategies for Teaching Appropriate Behaviors to Children with Emotional/Behavioral Disorders

Robert B. Rutherford, Jr., Mary M. Quinn, Sarup R. Mathur

#D5133 39pp ISBN 0-86586-268-0

Planning and Implementing Effective Programs for School-Aged Children and Youth with Emotional/Behavioral Disorders Within Inclusive Schools

Howard S. Muscott, Daniel P. Morgan, Nancy B. Meadows

#D5134 50pp ISBN 0-86586-269-9

Teacher-Mediated Behavior Management Strategies for Children With Emotional/Behavioral Disorders

Sarup R. Mathur, Mary M. Quinn, Robert B. Rutherford, Jr.

#D5135 38pp ISBN 0-86586-270-2

Types of Youth Aggression and Violence and Implications for Prevention and Treatment

Richard Van Acker

#D5136 42pp ISBN 0-86586-271-0

Ensuring Appropriate Services to Children and Youth with Emotional/Behavioral Disorders—Reports from Two CCBD Working Forums on Inclusion

Edited by Lyndal M. Bullock and Robert A. Gable

St. Louis, MO Forum
#D5039 1994 40pp **$7.50** *Prices Reduced*
Hartford, CT Forum **#D5056** 1994 47pp **$7.50**

NEW

Perspectives on School Aggression and Violence-Highlights from the 1995 CCBD Working Forum on Children and Youth Who Have Aggressive and Violent Behaviors

Edited by Lyndal M. Bullock and Robert A. Gable

Offers diverse viewpoints of individuals from education, community agencies, and health organizations on what we know about violence in schools; school-based programs that work; and emerging best practices in homes, schools, and communities.

#D5138 48pp 1995 ISBN 0-86586-273-7
$13.95 CEC Members **$9.75**

A Continuing Education Program on ADHD

Video Training Package

Incorporating the latest research available on the topics of ADHD, this video training package provides information in four key areas: Characteristics and Identification, Model School Programs, Effective Classroom Interventions, and Policy and Administrative Issues. The package includes a 30-minute video and a comprehensive manual that provides detailed information in each of the critical areas. The program was developed by leading educators in the field: Ron Reeve, University of Virginia; Mary Spessard, Coloma Schools, MI; Ron Walker, Walker Educational Consulting, Inc.; Ann Welch, Albemarle County Public Schools, Charlottesville, VA; James Wright, Auburn University at Montgomery, AL; and Judy Schrag, Learning Systems Group, Washington, DC. ***A Continuing Education Program on Attention Deficit/Hyperactivity Disorder*** was supported by a federally funded grant from the Division of Personnel Preparation, Office of Special Education Programs, U.S. Department of Education. *Closed Captioned.*

#M5144 1996 ISBN 0-86586-278-8 **$109** CEC Members **$76**

Facing the Challenges of ADD

The Chesapeake Institute and The Widmeyer Group

Video Package

This package of materials is designed to help parents, educators, and health professionals who are struggling to help children with ADD to succeed. The materi[illegible] is based on a synthesis of research about ADD and identified practices that hel[illegible] children succeed both academically and socially. The centerpiece of this effort is two videos—Facing the Challenges of ADD (a 30-minute video directed primarily to parents), and One Child in Every Classroom (an hour-long video that provides effective teaching strategies). The package also includes a Users Guide, an extensive directory of materials, and several reproducible fact sheets. The product was developed with the support of the U.S. Department of Education's Office of Special Education Programs (OSEP).

#M5105 1995 **$50**

A.D.D. from A to Z

A Comprehensive Guide to Attention Deficit Disorder

William N. Bender and Phillip J. McLaughtin

Video Package

A set of four videotapes that feature the experiences of parents, teachers, and other professionals who provide direct service to children with ADD.

Program 1: Characteristics of ADD.

Program 2: Instructional Strategies for ADD.

Program 3: Medical Interventions for ADD.

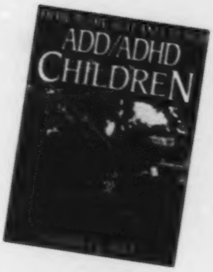
Program 4: Parenting Strategies for ADD.

Printed materials include charts, forms, and checklists useful to teachers and p[illegible]ents.

#S5123 1995 **$195**

Additional resources on ADD are listed on page 1.

How to Reach and Teach ADD/ADHD Children

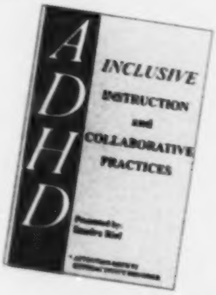


Practical Techniques, Strategies, and Interventions for Helping Children with Attention Problems and Hyperactivity

Sandra F. Rief

This complete resource is like having an expert at your side to answer virtually any question on how to work with children with learning disabilities, attention problems, or with children who are underachieving for any number of reasons. You will learn how to teach students organization and study skills as well as detailed, multisensory strategies for teaching reading, writing, and math.

#S391 1993 245pp ISBN 0-87628-413-6 **$27.95** CEC Members **$23.75**



ADHD: Inclusive Instruction and Collaborative Practices

Sandra F. Reif

Developed by the author of *How to Reach and Teach ADD/ADHD Children*, this video demonstrates successful and proven techniques that are positive, practical, and educationally sound for use by teachers in regular classrooms.

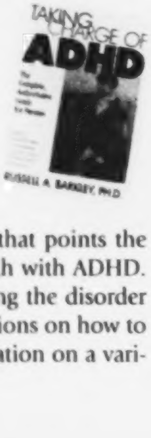
#M5085 1994 38 min/VHS **$110** CEC Members **$99**

Teaching Strategies: Education of Children with Attention Deficit Disorder

Chesapeake Institute

Help for general educators and parents who are trying to understand and teach students with ADD. Contents: Understanding ADD; Getting Help for Students; Working with Students on Medication Programs; Teaching Students with ADD; Making it Work in the Classroom; and Locating Additional Resources. Buy in bulk and use as a resource. The book gives teachers real examples of techniques they can use.

#P5076 1994 38pp **$8.90** CEC Members **$6.25**



Taking Charge of ADHD

NEW

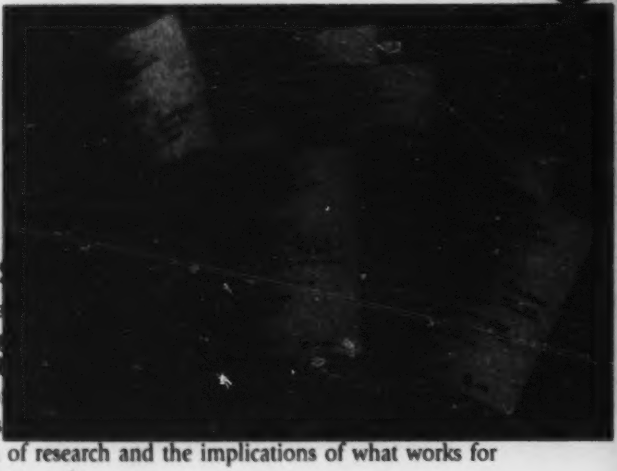
The Complete Authoritative Guide for Parents

Russell A. Barkley

A wise and compassionate book for parents and professionals that points the way toward a positive approach for managing children and youth with ADHD. Presents pioneering research that provides insight into preventing the disorder from becoming a major problem for family life. Provides suggestions on how to manage ADHD behavior in everyday situations. Presents information on a variety of medications.

#S5146 1995 294pp ISBN 0-89862-099-6 **$17.75** CEC Members **$16.00**

CEC'S MINI-LIBRARY



Exceptional Children At Ri

Eleven books for pra
ers to use in targetin
and youth with disa
are at risk because o
cial health problems
provides a synthesis of research and the implications of what works for practitioners and program planners.

Order the entire set and save over 10%.
#P361 1991 **$88** CEC Members **$62**

Mini-Library Books may also be ordered individually. **$8.90** *each; CEC Members* **$6.25**

Programming for Aggressive and Violent Students

Richard L. Simpson, Brenda Smith Myles, Brenda L. Walker, Christine K. Ormsbee, and Joyce Anderson Downing

Describes how collaborative approaches can be used to address the achievement and social needs of students who are aggressive and/or violent. CEC/ERIC

#P350 42pp ISBN 0-86586-207-9

Abuse and Neglect of Exceptional Children

Cynthia L. Warger with Stephanna Tewey and Marjorie Megivern

Examines the role of the special educator in dealing with abused and/or neglected children. CEC/ERIC

#P351 44pp ISBN 0-86586-208-7

Homeless and in Need of Special Education

L. Juane Heflin and Kathryn Rudy

Examines the role of networking in improving the delivery of effective services to homeless children and youth. CEC/ERIC

#P353 46pp ISBN 0-86586-210-9

Hidden Youth: Dropouts from Special Education

Donald L. MacMillan

Provides insights on who leaves school and how they are counted. CEC/ERIC

#P354 37pp ISBN 0-86586-211-7

Depression and Suicide: Special Education Students At Risk

Eleanor C. Guetzloe

Shows how the special education model can be used to provide services to youth who are depressed and potentially suicidal. CEC/ERIC

#P356 45pp ISBN 0-86586-213-3

Rural, Exceptional, At Risk

Doris Helge

Nineteen special factors are described that present special service-delivery problems to children with disabilities who live in rural areas. CEC/ERIC

#P359 48pp ISBN 0-86586-216-8

Language Minority Students with Disabilities

Leonard M. Baca and Estella Almanza

Describes how prereferral intervention, proper assessment, and appropriate instruction can decrease the risk factors for these children. CEC/ERIC

#P357 56pp ISBN 0-86586-214-1

Alcohol and Other Drugs: Use, Abuse, and Disabilities

Peter E. Leone

Examines who is most at risk for abuse of alcohol and drugs and describes how community-based efforts can reduce the risk. CEC/ERIC

#P358 33pp ISBN 0-86586-215-X

Born Substance Exposed, Educationally Vulnerable

[illegible]th J. Vincent, Marie Kanne Poulsen, Carol K. Cole, Geneva Woodruff, and Dan R. Griffith

Presents information on behavioral patterns of children who were exposed prenatally to drugs and alcohol and describes how to serve these children through transagency programs. CEC/ERIC

#P355 30pp ISBN 0-86586-212-5

Double Jeopardy: Pregnant and Parenting Youth in Special Education

Lynne Muccigrosso, Marylou Scavarda, Ronda Simpson-Brown, and Barbara E. Thalacker

Problems faced by teen parents with disabilities and teens having babies with disabilities are examined and suggestions for service are presented. CEC/ERIC

#P360 44pp ISBN 0-86586-217-6

Special Health Care in the School

Terry Heintz Caldwell, Barbara Sirvis, Ann Witt Todaro, and Debbie S. Accouloumre

Interventions for students with traumatic brain injury; HIV, AIDS, and AIDS-related complex; and children who require ventilator assistance are examined. CEC/ERIC

#P352 56pp ISBN 0-86586-209-5

ALSO AVAILABLE

Guidelines for the Delineation of Roles and Responsibilities for the Safe Delivery of Specialized Health Care in the Education Setting

Developed by the Joint Task Force for the Management of Children with Specialized Health Needs of AFT, CEC, NEA, and NASN. Indicates which personnel are qualified to perform 67 different procedures.

#R632 1990 20pp ISBN 0-86586-194-3 **$5**

HIV Prevention and AIDS Education: Resources for Special Educators

Elizabeth Byrom and Ginger Katz, Editors

Written for teachers, this joint publication from CEC and the Association for the Advancement of Health Education (AAHE) provides basic information, policies, resolutions, and principles for prevention related to HIV and AIDS. Valuable curriculum suggestions for teaching about HIV infection and AIDS from kindergarten through 12th grade.

#P365 1991 34pp ISBN 0-86586-193-5 **[illegible]** CEC Members **$6.25**

How Are Kids Smart?

Multiple Intelligences in the Classroom

Featuring Howard Gardner

Videos

Teachers and students join Howard Gardner in an exploration of Multiple Intelligences (M.I.). Observe first-hand how teachers at the Fuller Elementary School in Gloucester, MA have incorporated M.I. into their teaching, classrooms, and community.

#M5147T Teachers' version ISBN 1-887943-02-1 VHS 31 min **$72.75** CEC Members **$65.50**
#M5147A Administrators' version (tells how to implement) ISBN 1-887943-03-X VHS 41min **$104.50** CEC Members **$94**

In Balance: Gifted Education and Middle Schools

The National Training Program for Gifted Education

Video Package

Tensions between middle-school advocates and gifted advocates are brought to life through dialogue among gifted middle-school students and educators from both groups. Balance is sought and common ground established for creating effective school environments where all student needs are met. *Closed Captioned.*

#M5148 1996 30min **$99** CEC Members **$69.30**

Gifted Education and School Reform: Making the Connection

The National Training Program for Gifted Education

Video Package

Witness the point-counterpoint of education leaders of gifted education and school reform as they present diverse views about strategies and programs. School districts struggling with how to provide appropriate school experiences for their gifted students will find this video to be an excellent starting point for discussion with parents, school board, administrators, and teachers. Package includes a 38-page report *Toward a Common Agenda: Linking Gifted Education and School Reform* which may be ordered separately (**#P5088, $18.50** CEC Members **$13**).

#M5089 1995 **$99** CEC Members **$69.30**

Being Gifted: The Gift

Sandra K. Warren

Video Package

Gifted children discuss various aspects of being gifted. The package includes a comprehensive guidebook that explains the video's objectives, outlines dis[illegible]sion topics, and provides 25 reproducible follow-up activities.

#M348 1991 15 min. **$129** CEC Members **$99**

Additional resources on gifted education are listed on page 1

NEW

Raising Your Child to Be Gifted

Successful Parents Speak!

James Reed Campbell

A remarkable book of specific, concrete strategies for nurturing giftedness distilled from interviews with more than 10,000 parents of gifted children in the United States, Greece, Japan, and the Republic of China. These easy-to-follow "recipes" show how to support and encourage children's best efforts and create academic excellence.

#S5149 1995 208pp ISBN 1-57129-0000-1 **$21** CEC Members **$19**

Teaching Gifted Kids in the Regular Classroom

Susan Winebrenner

Teaching Gifted Kids in the Regular Classroom

Use proven techniques and strategies to ensure that gifted students in your class are highly motivated, challenged, productive, and have positive learning experiences. Includes lots of reproducible handouts and student profiles.

#S392 1992 168pp ISBN 0-915793-47-4 **$19.95**

Planning Effective Curriculum for Gifted Learners

Joyce VanTassel-Baska

Be prepared to design and implement a curriculum that works for your gifted students. Checklists, forms, differentiated activities, and dozens of practical ideas for planning curriculum K-12 make this book an essential part of planning content-based programs. Sample units provide practical applications for all students, including disadvantaged and learning disabled populations.

#S382 1992 385pp ISBN 0-89108-218-2 **$29.95**

College Planning for Gifted Students, Second Edition

Sandra L. Berger

College Planning for Gifted Students
Second Edition
Sandra L. Berger

Use this step-by-step guide for discovering the right fit between student and college. Helps students examine personal goals, values, and learning styles. Describes how to [illegible] out what a college is really like. Revised edition includes information on the new SAT and current news concerning financial assistance.

#P330R 1994 150pp ISBN 0-86586-246-X. CEC/ERIC **$21.95** CEC Members **$15.35**

WHAT 12 SCHOOLS HAVE TO SAY

Creating Schools for All Our Students

What 12 Schools Have to Say

A Product of the Working Forum on Inclusive Schools sponsored by the following national associations: AASA, AFT, CEC, The Council of Great City Schools, NAESP, NASBE, NASDSE, NASSP, NEA, and NSBA.

Honorable Mention, 1995 Gold Circle Award

Find out what teachers, principals, classroom aides, parents, and other school personnel discovered when they sat down together to explore how inclusion works in their respective communities. This resource highlights the essential elements that make inclusive schools the preferred environment for serving all students.

#P5064 1994 80pp ISBN 0-86586-255-9 **$18.50** CEC Members **$13**

Developing Inclusive Schools: A Guide

NEW

Barbara Hoskins

A practical guide to help administrators, teachers and special education staff work in a coordinated way to redesign services. Filled with dozens of strategies and planning processes that will be useful to the whole school staff. Highlights include Roles in Inclusive Schools, Resistance, Motivation, Curriculum, Systems of Support, Collaborative Consultation, School-Based Teams, Leadership, and Developing an Inclusive Culture.

#S5150 1995 222pp **$29.95**

Thinking About Inclusion and Learning Disabilities: A Teacher's Guide

NEW

Katherine Garnett

This pamphlet designed for general and special educators highlights the most current thinking and research on learning disabilities and inclusion. The guide poses critical questions and provides mini case studies. It also offers practical activities for teacher teams to try out as they examine how their classroom structures and instructional interaction affect their students.

#D5140 1-9 copies **$3** each; 10-49 copies **$2** each; 50+ copies **$1** each

Inclusion Video Package

Leonard C. Burrello, Executive Producer

#M5015 1993 **$225** CEC Members **$178**

1. Two Faces of Inclusion: The Concept and the Practice

Suggests how to start and maintain the momentum to change teaching and learning for all students.

#M5017 1993 50min **$142**
CEC Members **$99**

2. Facing Inclusion Together

Depicts co-teaching with general and special educators collaborating. Shows how to negotiate new relationships, share classrooms, and develop co-responsibility.

#M5019 1993 50min **$142**
CEC Members **$99**

The Power of Two: Making a Difference Through Co-Teaching

Leonard C. Burrello, Jotham M. Burrello, and Marilyn Friend

Video Package

NEW

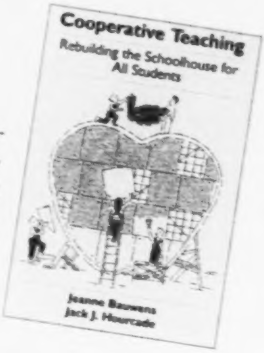
This tape provides an in-depth look at co-teaching partnerships. It leads the viewer through six different types of co-teaching arrangements and discusses situations for which each is appropriate. Experienced co-teachers and experts offer strategies and tactics for addressing the related pragmatic issues that occur both inside and outside the classroom. Making co-teaching successful at elementary through high school levels is emphasized. Marilyn Friend narrates the view through a five-step conceptual framework that is useful for novice co-teachers, as well as more experienced practitioners. A 35-page booklet prepared by Marilyn Friend and Lynne Cook accompanies the video.

#M5151 $155 CEC Members **$109**

Cooperative Teaching

Rebuilding the Schoolhouse for All Students

Jeanne Bauwens and Jack J. Hourcade



Offers educators who are moving toward cooperative teaching, a practical, down-to-earth guide to planning, implementation, and self-evaluation. Tells how partners in cooperative teaching can coordinate their efforts, build supportive relationships, cope with scheduling, find time for planning, and evaluate the success of their efforts. Used as a primary resource in CEC's Inclusive Schools training programs.

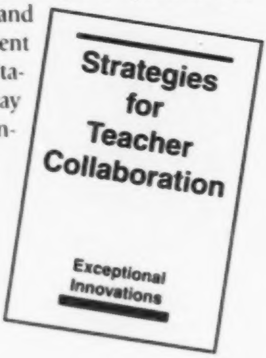
#S5093 1995 237pp ISBN 0-89079-607-6 **$32.20**
CEC Members **$29**

Strategies for Teacher Collaboration

Loviah E. Aldinger, Cynthia L. Warger, and Paul W. Eavy

A resource to help school-based teams bring collaborative teaching into practice. Provides 18 specific inservice activities to help teachers understand the dynamics of collaboration. These professional development activities apply the Problem-Solving Model to teacher consultation and help teachers work through any resistance they may have to form the kinds of teaching relationships that are essential in inclusive school settings.

#S5068 1991 200pp **$55** CEC Members **$49**



Performance Assessment Mini-Library

This mini-library addresses the use of performance assessment with students with disabilities in four areas: instruction; meaningfulness; state and national perspectives within the context of educational reform; and its use in outcomes-based accountability systems.

Save 10% when you purchase all four titles.
#P5062 1994 **$32** CEC Members **$22.50**

Connecting Performance Assessment to Instruction

Lynn S. Fuchs

This volume compares behavioral assessment, mastery learning, and curriculum-based measurement using seven criteria against which the instructional usefulness of these assessment methods can be judged. CEC/ERIC/OSEP

#P5058 1994 37pp ISBN 0-86586-248-6 **$8.90**
CEC Members **$6.25**

Creating Meaningful Performance Assessments: Fundamental Concepts

Stephen N. Elliott

Discusses the characteristics of performance assessment that are essential to their meaning and how performance assessment relates to cognitive and behavioral psychology. CEC/ERIC/OSEP

#P5059 1994 35pp
ISBN 0-86586-249-4 **$8.90** CEC Members **$6.25**

National and State Perspectives on Performance Assessment and Students with Disabilities

Martha L. Thurlow

Illustrates how performance assessments are used in national data collection programs and state programs. CEC/ERIC/OSEP

#P5060 1994 37pp ISBN 0-86586-251-6 **$8.90**
CEC Members **$6.25**

Performance Assessment and Students with Disabilities: Usage in Outcomes-Based Accountability Systems

Margaret J. McLaughlin and Sandra Hopfengardner Warren

Discusses issues of practical use and presents a collection of case studies in outcomes-based accountability systems of selected local school districts and state programs. CEC/ERIC/OSEP

#P5061 1994 32pp ISBN 0-86586-250-8 **$8.90**
CEC Members **$6.25**

Trends in Assessment:

Diagnostique Monograph 1994-1995

NEW

Ronald L. Taylor and Gerald Tindal, Editors

Reviews the latest trends in assessment for students with learning disabilities and learning disorders. Examines critical issues in assessment for vocational preparation, career development, and transition; advances in teacher-oriented assessment; and the monitoring of school reform through student performance measures. Research is presented on portfolio assessment, performance assessment, and the recognition of students with ADD.

#D5143 1995 244pp **$28.00**

Working Together

Workplace Culture, Supported Employment, and Persons with Disabilities

David Hagner and Dale Dileo

A new approach to assisting individuals with significant disabilities achieve meaningful careers. The book stresses partnerships between businesses, service providers, and natural support systems to achieve positive employment outcomes. Central to the approach are proven strategies that facilitate social inclusion into the cultures of workplaces. Provides the tools to assist in the process of social inclusion.

#S5129 1993 277pp ISBN 0-914794-88-3 **$27.95** CEC Members **$25**

Integrating Transition Planning Into the IEP Process

Lynda L. West, Stephanie Corbey, Arden Boyer-Stephens, Bonnie Jones, Robert J. Miller, and Mickey Sarkees-Wircenski

Transition Planning

Help students make a smooth transition from school to adult life by making sure the skills they need for successful employment, community involvement, postsecondary education, leisure pursuits, and self-advocacy will be written into their IEP. Explore ways schools, community service agencies, private organizations, and families can work together.

A joint publication of DCDT and CEC.

#P386 1992 78pp ISBN 0-86586-222-2 **$15.70** CEC Members **$11**

Social Skills in the School and Community

Laurence Sargent, Editor

Designed for use with students who spend at least a portion of the day integrated into general education classes. These practical social skill lessons are arranged for elementary, middle, and secondary school students. Skills address the following areas: getting along with peers, teachers, people in the community, and fellow workers.

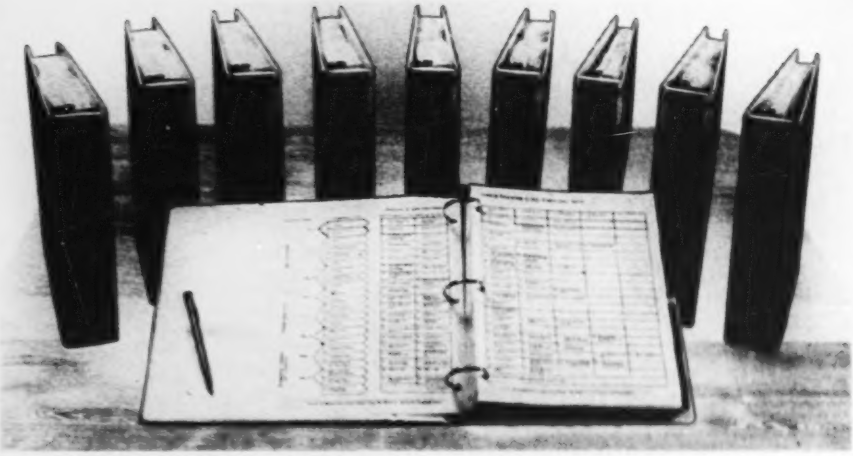
#D412 1991 308pp **$18** CEC Members **$15**

Life Centered Career Education: Activity Books 1 and 2

Lynn Miller, Lynda Glascoe, and Charles J. Kokaska

Each book contains one activity for each of the LCCE subcompetencies. These activities are especially appropriate for students in the 9-13 age range. CEC/ERIC

Book One - **#P303** ISBN 0-86586-162-5
Book Two - **#P304** ISBN 0-86586-163-3
1986 96pp each **$15.40** CEC Members **$10.80**



Life Centered Career Education

The Complete Package

Includes over 1,100 lesson plans covering Daily Living Skills, Personal-Social Skills, and Occupational Skills; Knowledge Batteries (10 copies of each of two alternative forms); Performance Batteries; Administration Manuals; and Technical Report.

#P371 1992 **$980**
20% discount for school districts or states ordering 10 or more sets.

LCCE: Daily Living Skills

Donn E. Brolin

Gives you 472 lesson plans covering personal finances, household management, personal needs, family responsibilities, food preparation, citizenship responsibilities, and leisure.

#P367 1,556pp 3 loose-leaf binders
ISBN 0-86586-224-9 **$400**

LCCE: Personal-Social Skills

Donn E. Brolin

Provides 370 lesson plans for developing self-awareness, self-confidence, socially responsible behavior, good interpersonal skills, independence, decision making, and communication skills.

#P368 1,348pp 3 loose-leaf binders
ISBN 0-86586-225-7 **$400**

LCCE: Occupational Guidance and Preparation

Richard T. Roessler and Donn E. Brolin

Includes 286 lesson plans to help students explore occupational possibilities; make occupational choices; develop appropriate work habits; seek, secure, and maintain employment; exhibit sufficient physical/manual skills; and obtain specific occupational competencies.

#P369 670pp 2 loose-leaf binders
ISBN 0-86586-226-5 **$300**

LCCE: Competency Assessment Knowledge Batteries

Available in parallel forms, each Knowledge Battery consists of 200 multiple-choice questions that cover the first 20 competencies. Primarily a screening instrument, the Knowledge Batteries were designed to pinpoint specific competency deficiencies. You receive a loose-leaf notebook that includes an Administration Manual, a Technical Report, and samples of each form of the test. You also will receive two introductory sets of 10 Knowledge Batteries, Forms A and B, to use with students.

#P370K 152pp ISBN 0-86586-239-7 **$125**

LCCE: Competency Assessment Performance Batteries

The Performance Batteries consist of two alternative forms for each of the 21 competency units. Items are primarily performance-based and should be administered to students before and after instructional units have been taught. Performance Batteries are administered individually or with small groups of students. Test materials must be reproduced as needed. Performance Batteries are packaged in a loose-leaf binder along with an Administration Manual.

#P370P 675pp ISBN 0-86586-240-0 **$225**

ADDITIONAL SETS OF KNOWLEDGE BATTERIES

[illegible]ages of 10 tests may be ordered separately to be used by students. Students may answer questions directly in the test booklets by circling the correct choice or may use a standard machine-scorable form. Knowledge Batteries may not be reproduced.

LCCE: Knowledge Battery Form A (10 per package)

#P372 $50

LCCE: Knowledge Battery Form B (10 per package)

#P373 $50

Life Centered Career Education: A Competency Based Approach, Fourth Ed.

Donn E. Brolin

The guide contains the most current set of transitional objectives and units for 97 subcompetencies. Includes a Competency Rating Scale and IEP Forms with transition components. This updated 1993 version keeps all the familiar components of earlier editions but also includes essential references to the Complete LCCE Package, the new LCCE Video-Training Package, and transition requirements f[illegible] IEP.

#P180F 1993 175pp ISBN 0-86586-241-9 **$28** CEC Members **$19.60**

160

Life Centered Career Education Training Package

Donn E. Brolin

A 30-hour staff development package designed to train teachers to use the Life Centered Career Education approach in their classrooms. Staff developers will have no problem following the easy-to-use Trainer's Manual. Additional Professional Development Activity Books may be ordered separately for each trainee. Videotapes model the use of the components of the program as well as provide information on how to integrate the LCCE concept into existing curriculum and community activities.

The Package includes:
- Ten Videotapes
- Professional Development Activity Book
- Trainer's Manual
- LCCE: A Competency Based Approach (described on page 17)

#M5000 1993 Package Price **$975**

Videotapes

Each tape is approximately 1 hour in length and includes presentations, discussions, and classroom demonstrations. Tapes may be used individually by teachers who wish to see certain techniques demonstrated and by groups of individuals who wish to use the tape as a focus for discussion and further brainstorming about local implementation.

I. The Need to Change and the Law–**M5001**

II. The LCCE Curriculum (K-12)–**M5002**

III. Assessing Functional Skills–**M5003**

IV. Teaching Daily Living Skills–**M5004**

V. Teaching Personal-Social Skills–**M5005**

VI. Teaching Occupational Skills–**M5006**

VI. Selection, Modification, and Development of Instructional Materials (Part 1) Involving Parents in Functional Curriculum (Part 2)–**M5007**

VIII. Involving Business and Industry (Part 1) Interagency Collaboration (Part 2)–**M5008**

IX. Curriculum Modification and Change–**M5009**

X. Individualized Transition Planning and Implementation–**M5010**

Tapes may be ordered separately by Stock Number. $100 each

Life Centered Career Education: Trainer's Manual, 1993 Edition, and Professional Development Activity Book

Donn E. Brolin

The 1993 revision of the Trainer's Manual provides approximately 30 hours of LCCE inservice training designed around the video presentations. Orientation and directions for conducting each session are integrated into the Professional Development Activity Book described on this page.

#M5011. Two-Volume Set
ISBN 0-86586-244-3 **$70**

Life Centered Career Education: Professional Development Activity Book

Donn E. Brolin

Designed for use by all participants in the training program. Each session includes objectives, key concepts from that session's video, session activities, note-taking pages, resource materials, and assignments for the next session. The Activity Book is packaged in a loose-leaf binder.

#M5013 ISBN 0-86586-242-7 **$40**

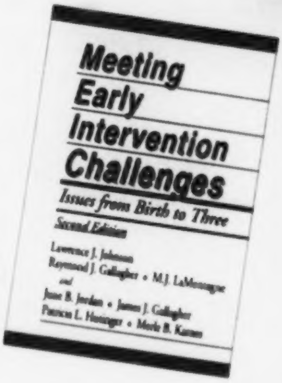
Administrator's Policy Handbook for Preschool Mainstreaming

B[illegible]ra J. Smith and Deborah F. Rose

This handbook has been prepared specifically for the public school administrator who is developing the policies and procedures to serve young children with disabilities in mainstreamed settings. Provides strategies on how to influence public policy and options to overcome barriers. The appendices contain sample policy documents developed by states and localities.

#S5124 1993 200pp ISBN 0-914797-80-8 **$39.95** CEC Members **$36**

Meeting Early Intervention Challenges: Issues from Birth to Three


Meeting
Early
Intervention
Challenges
Issues from Birth to Three
Second Edition
Lawrence J. Johnson
Raymond J. Gallagher • M.J. LaMontagne
and
June B. Jordan • James J. Gallagher
Patricia L. Hutinger • Merle B. Karnes

Edited by Lawrence J. Johnson, Raymond J. Gallagher, M. J. LaMontagne, and June B. Jordan, James J. Gallagher, Patricia L. Hutinger, and Merle B. Karnes

Prominent leaders in the field detail critical new approaches to service delivery and provide concrete strategies for personnel development and policy application. Shows how states have successfully resolved today's questions concerning administration, collaboration, competency issues, eligibility, evaluation, programmatic practices, parental involvement, and public policy.

[illegible]4 1994 307pp ISBN 1-55766-131-6 **$30**

New Opportunities for Collaboration: A Policy and Implementation Resource Training Manual for the Head Start Regulations for Children with Disabilities

Division for Early Childhood

A technical assistance document to assist state and local communities in the adoption of policies for promoting collaboration between Head Start and the IDEA, Part B programs for young children with disabilities and their families. Includes Q & A, Fact Sheet, transparency masters with highlights of the new Head Start regulations, a side-by-side analysis of the Head Start regulations and comparable IDEA, Part B regulations, a listing of resources available to state and local agencies to assist in implementation and collaborative efforts, and a set of Head Start Regulations.

#D5053 1994 **$17.25** CEC Members **$12**

DEC Recommended Practices: Indicators of Quality in Programs for Infants and Young Children with Special Needs and Their Families

[illegible]ion for Early Childhood

Includes validated practices in the areas of assessment, family participation, IFSPs and IEPs, intervention strategies, transition, personnel competence, evaluation, and specific skills interventions.

#D417 1993 136pp ISBN 0-86586-234-6 **$20** CEC Members **$14**

Multiple Voices for Ethnically Diverse Exceptional Learners

Bridgie Alexis Ford, Editor

A collection of articles that provides effective research-to-practice information and activities for working with students from culturally and linguistically diverse (CLD) backgrounds. In a section on "In the Oral Tradition" three prominent African-American special educators voice their views on critical issues. Another article addresses the recruitment of CLD graduate students into teacher education programs. This product is the second monograph by the Division for Culturally and Linguistically Diverse Exceptional Learners.

#D5139 1995 57pp ISBN 0-86586-276-1 **$16.00** CEC Members **$11.20**

Multicultural Issues in the Education of Behaviorally Disordered Youth

Reece L. Peterson and
Sharon Ishii-Jordan, Editors

This collection of papers helps to develop an awareness of how racial, ethnic, and cultural factors impact on identifying and educating students who have, or appear to have, emotional or behavioral disorders. One section addresses specific symptomologies—substance abuse, aggression, depression, and delinquency—and relates these symptom sets to multicultural issues, drawing implications for practice.

#S5127 1994 291pp ISBN 0-914797-89-1
$33.95 CEC Members **$30.50**

Addressing Cultural and Linguistic Diversity in Special Education

Issues and Trends

Shernaz B. Garcia, Editor

The first mongraph by the Division for Culturally and Linguistically Diverse Exceptional Learners includes articles that focus on issues related to education reform, evaluation of instruction, and student assessment for African-American students, Asian and Pacific Islander gifted students, Mexican-American gifted students, and other culturally and linguistically diverse students.

#D5086 1994 57pp ISBN 0-86586-258-3
$16 CEC Members **$11.20**

Planning and Organizing for Multicultural Instruction,

Second Edition

Gwendolyn C. Baker

Offers teachers a variety of classroom-tested strategies to infuse multicultural concepts into the classroom. These instructional strategies cover all content areas, including art, language arts, math, music, science, and social studies. Although not written primarily for special educators, the techniques offered are appropriate for all students.

#S5153 1994 363pp ISBN 0-201-86112-7 **$21**
CEC Members **$18.95**

Kids Explore the Gifts of Children with Special Needs

Westridge Young Writers Workshop

A sensitive and thought-provoking look at the gifts of children with special needs as seen by their peers. Written by third- to sixth-graders, each chapter tells what it is like to live with a particular disability. Disabilities include dyslexia, attention deficit disorder, cerebral palsy, hemophilia, blindness, hearing impairment, fetal alcohol syndrome, brittle bone disease, dwarfism, and Down syndrome.

#S5154 1994 115pp ISBN 1-56261-156-9
$10.50 CEC Members **$9.45**

The 3R's for Parents

Rights, Resources, Results

PARENTS
Rights
Resources
Results

Grace Hanlon Trevor

Video

Discovering that a child may require special education services can be confusing, frightening, and overwhelming for parents. This video can help empower parents by explaining the referral, testing, and evaluation process; advocacy and legal assistance; preparing for school meetings including the IEP meeting; enhancing a child's educational program at home; planning for a child's financial future; and guardianship and adult services.

#M5152 1995 60min ISBN 0-9646168-0-7 **$49.95** CEC Members **$39.95**

Special Education Law,

Second Edition

Laura F. Rothstein

Special Education Law

This book provides a comprehensive overview of special education law, with an approach that focuses on avoidance and prevention of legal problems. All the major judicial decisions, statutes, and regulations regarding special education are presented, with interpretations and explanations of their meanings and significance to the field.

#S5096 1995 336pp ISBN 0-8013-1234-5 **$40.95**

The Foundations of Special Education: Selected Papers and Speeches of Samuel A. Kirk

Gail A. Harris and Winifred D. Kirk, Editors

This collection of 25 selected papers and speeches written and presented between 1936 and 1982 remain as fresh and current today as when they were first conceived. Sam Kirk is acknowledged to be one of the early giants in special education whose foresight placed him years ahead of his colleagues. Includes sections on: • Early Childhood • Mental Retardation • Learning Disabilities • Remedial Reading • Hearing Impairment • The Illinois Test of Psycholinguistic Ability • Congressional and Government Affairs • Social Issues

#P388 1993 303pp ISBN 0-86586-236-2 **$35.70** CEC Members **$25**

CEC Special Education Advocacy Handbook

Jaclyn A. Bootel

This easy-to-use handbook will help you become an effective advocate for implementing positive reform in special education. The Handbook illuminates what motivates policymakers, what catches their attention, and what makes them respond. It demystifies policymaking and helps you organize and prepare for framing key issues and packaging information.

#R5087 1995 104pp ISBN 0-86586-259-1 **$17** CEC Members **$12**

34 Activities to Promote Careers in Special Education and the Related Services

NEW

The National Clearinghouse for Professions in Special Education

"Make a Difference--Be a Special Educator." Use this guide to introduce individuals to the opportunities, rewards, and delights of working with children with exceptionalities. It provides directions on how to plan, develop, and implement activities in the school and community that will increase people's awareness of careers in special education and related services. Activities are organized into three sections: Increasing Visibility; Direct Recruitment Efforts; and Marketing the Profession.

#R5145 1996 120pp ISBN 0-86586-277-X
$14.30 CEC Members **$10.00**
#R5145X Pkg. of 10 **$30.00**

What Every Special Educator Must Know

The International Standards for the Preparation and Certification of Special Education Teachers

The Council for Exceptional Children

Use these professional standards for state certification and accreditation of professional preparation programs. Includes common core standards for knowledge and skills for all beginning special education teachers as well as expanded sets of standards in the areas of deaf or hard of hearing, early childhood, emotional/behavioral disorders, gifted, learning disabilities, mental retardation/developmental disabilities, physical and health disabilities, and visual impairments.

#R5128 1995 139pp **$14.30**
CEC Members **$10.00**

Directory of Programs for Preparing Individuals for Careers in Special Education, 1995 Edition

The Council for Exceptional Children

A searchable database of over 600 colleges and universities with programs in special education. Information includes institution name, address, contact person, telephone, FAX, Internet, accreditation status, size of faculty, level of program (e.g., undergraduate), and areas of specialty. The printed directory includes an index listing all programs by specialty area. The searchable database puts information at your fingertips. It can also be used to create regional or topical fact sheets and mailing labels. Each package includes a printed copy of the directory and a diskette.

R5079D 1995 256pp **$75** CEC Members **$52.5**

CEC Policies for Delivery of Services to Exceptional Children

The Council for Exceptional Children

CEC's basic commitments and responsibilities in the areas of appropriate education, interagency coordination, administration, attendance, accountability, early childhood, gifted, communicable diseases and health care, community-based services, testing, ethnic and multicultural, career education, and transition.

#R5075 1994 **$14.30** CEC Members **$10**

Instructional Manual for Preparing Folios to Meet CEC/NCATE Special Education Guidelines, 1992 Edition

The Council for Exceptional Children

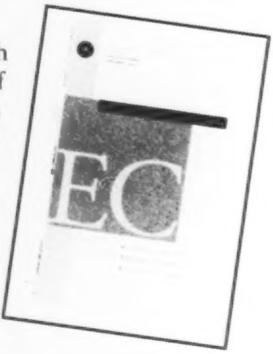
#R635 1992 **$14.30** CEC Members **$10**

TEACHING Exceptional Children

Ideas to enhance learning! A practical classroom-oriented magazine. Explores instructional methods, materials, and techniques for working with children who have disabilities or who are gifted. Articles reflect approaches that blend theory with practice. Editors: H. William Heller and Fred Spooner. Received with CEC membership. (US ISSN 0040-0599)

Beginning Fall 1996 (Volume 29), TEC will be published six times a year. New subscription price **$58;** Foreign-Surface **$66;** Foreign-Air Printed Matter **$95;** Single copy **$10.**

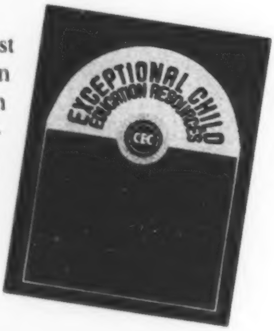
Exceptional Children



Research you can depend on! Informs readers through research studies, articles by authorities in the field of special education, and discussions of current issues and problems. Editors: Bob Algozzine and Martha Thurlow. Received with CEC membership. (US ISSN 0014-4029)

Beginning Fall 1996 (Volume 63), EC will be published four times a year with no reduction in number of pages per volume year. Subscription **$58;** Foreign-Surface **$66;** Foreign-Air Printed Matter **$95;** Single copy **$10.**

Exceptional Child Education Resources



CEC's quarterly abstract journal helps you stay abreast of the book, nonprint media, and journal literature in special education and gifted education. Published in May, August, November, and February. All subscriptions begin with the May issue. (US ISSN 0160-4309)

Quarterly. Volume 28 begins with the May 1996 issue. CEC Member Subscription **$69;** Institutional Subscription **$89**; Foreign Surface **$94;** Foreign-Air Printed Matter **$124;** Supplemental subscriptions shipped to the main institutional address **$44;** Single copy **$26;** CEC Members **$21**

Beginning Spring 1996, ECER will be available on CD-ROM from Silver Platter. For price and availability information call 1-800-343-0064.

Significant discounts on bulk subscription orders for school districts are also available. Call to discuss your needs with us. 1-800-CEC-READ (232-7323).

Behavioral Disorders

(US ISSN 0198-7249). A publication of the Council for Children with Behavioral Disorders (CCBD). Quarterly. Vol. 22 begins with November 1996 issue. Individual Subscription **$20;** Institutional **$50;** Foreign **$54;** Single copy **$12.50.**

Beyond Behavior

(US ISSN 1074 2956). A publication of the Council for Children with Behavioral Disorders (CCBD). Published three times a year. Volume 8 begins with Fall 1996 issue. Individual Subscription **$20;** Institutional **$35;** Foreign **$38;** Single copy **$12.50**

Career Development for Exceptional Individuals (CDEI)

(US ISSN 0885-7288). A publication of the Division on Career Development and Transition. Twice yearly. Volume 19 begins with Spring 1996 issue. Institutional Subscriptions only **$20;** Foreign **$24;** Single copy **$10.**

Diagnostique

(US ISSN 0737-2477). A publication of the Council for Educational Diagnostic Services (CEDS) Quarterly. Volume 22 begins with Fall 1996 issue. Subscription **$28;** Foreign **$32;** Single copy **$10.**

Education and Training in Mental Retardation and Developmental Disabilities

(US ISSN 0013-1237). A publication of the Division on Mental Retardation and Developmental Disabilities (MRDD). Quarterly. Volume 31 begins with March 1996 issue. Individual Subscription **$30;** Institutional Subscription **$55;** Foreign **$59.50;** Single copy **$15.**

Journal of Children's Communication Development

(US ISSN 0735-3170). A publication of the Division for Children's Communication Development (DCCD). Twice yearly. Volume 18 begins with Spring/Summer 1996 issue. Subscriptions **$16;** Foreign **$19;** Single copy **$10.**

Journal of Early Intervention

(US ISSN 0885-3460). A publication of the Division for Early Childhood (DEC). Quarterly. Volume 20 begins with Winter 1996 issue. Individual Subscription **$50;** Institutional **$70;** Foreign **$74;** Single copy **$17.50.**

Learning Disabilities Research & Practice

(US ISSN 0938-8982). A publication of the Division for Learning Disabilities. Quarterly. Volume 11 begins with March 1996 issue. In the US and Canada, individual subscription: $45; institutional: $180. In other countries, individual subscription: $70; institutional: $205. Published by Lawrence Erlbaum Associates, Inc., 10 Industrial Ave., Mahwah, NJ 07430-2262.

CEC's 1996 Symposium

Increasing Access to the School Curriculum

June 1996

This exciting 2-day event will present the principles and strategies necessary to adapt educational materials to serve as tools to help meet the instructional needs of diverse learners. The educational strategies discussed in the sessions apply to print materials and electronic products, as both sources of content and as tools of expression.

Instructional needs of diverse learners include the unique ways learners understand ideas and express themselves as a result of

- Culture.
- Language.
- Developmental maturity.
- Disabilities.
- Giftedness.
- Other individual differences.

The symposium will open with a keynote address by Doug Carnine, Professor, The University of Oregon, who will provide participants with an overview of the principles of the symposium and will contrast traditional curriculum materials design with the Improved Access design.

Key Points and Assumptions of the Symposium

- Improved accessibility means that access is incorporated into the design of the materials through flexible presentation of content and expression of response, in order to meet the needs for multiple modality.
- Educational materials are generally not designed to permit teachers to easily adapt them to meet the instructional needs of diverse learners.
- Educators need to know how to select, utilize, and adapt educational materials that accommodate the needs of diverse learners.
- Developers of educational materials need to know how to design educational materials that can accommodate the instructional needs of diverse learners.
- Educators will be increasingly accountable for the attainment of curricular mastery.
- Increasingly, all students will be expected to master general and specialized curricula.

Who Should Attend: Special Educators/Administrators, General Educators/Administrators, Curriculum Developers, and Publishers.

Session Topics

- Beginning Reading.
- Bilingual Education.
- Behavior and Classroom Management: An Instructional Approach.
- Science Instruction.
- Teaching Writing Skills.
- Mathematics Instruction.
- Social Studies/History Instruction.
- Assistive Technology: Tools for Accessibility.

For details call:

The Council for Exceptional Children

1-800-224-6830

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April 1–5, 1996
Orlando, Florida

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Learn new skills and strategies, fine-tune your communication style, and masterfully create links between competencies and desired outcomes. Discover components of effective leadership and explore advocacy, compliance, and procedural issues.

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- Transition
- Legal Aspects of Special Education: Federal and State Legislation
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2. *Reading Comprehension: Instruction for Individualized Needs,* **Anita Archer.** Explore strategies for teaching critical reading comprehension skills. Incorporate parallel writing assignments to complement instruction for communication and comprehension skills.

3. *Current Legal Trends Affecting Special Education,* **Reed Martin.** Explore how the changing governmental and legal landscape is affecting special education policy. Advocacy from a school and parental perspective, compliance, and procedural issues will be but a few of the many areas addressed.

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Future Conventions

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Charlotte, North Carolina	April 14–19, 1999
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4. *EL-SOL (Exceptional Learners-Speakers of Other Languages): Providing Appropriate Services to LEP Exceptional Students,* **Sandra Fradd/Rosalia Gallo.** Learn strategies to teach students in special education with limited English proficiency. Develop meaningful activities that will make English a permanent foundation for learning.

5. *Instructional Classroom Management,* **Edward Kameenui/Craig Darch.** Communicate information to learners that is clear and considerate. Unify instructional concepts with behavioral expectations.

6. *Cultural Influences on Teaching and Learning,* **Shernaz Garcia/Michelle Thomas.** Integrate a student's culture into your instruction. Improve communication and understanding of outcomes and competencies for students with disabilities and their families.

7. *Manage the Learning Environment: "Bully-Proofing" Your School,* **Nancy Sager/Bill Potter**. Make your school safe by adopting a comprehensive curriculum that addresses the "bully-behavior" that hinders learning for all students.

8. *Collaborative Interventions for Behaviorally At-Risk Students,* **Randy Sprick**. Learn to collaborate with faculty and family and design positive interventions for at-risk students. Establish clear parameters and consequences for students who exhibit disruptive behavior.

9. *Life Centered Career Education (LCCE): Functional Skills for Transition,* **Mabrey Whetstone**. Provide your school, classroom, and program with the most comprehensive array of competencies, learning objectives, and lesson guides to teach functional skills.

10. *Non-Graded School—Classrooms for All Learners,* **Lois Blackmore**. Take an old concept and revise it—create elementary classrooms where students feel supported and prepared to learn. Develop and adapt curriculum for students with special needs regardless of grade stature.

11. *Stress: Making Change Work in Education,* **Sally Pisarchick**. Turn the stress of educational change and evolution into energy and productivity. Learn problem-solving strategies, listening skills, relaxation strategies, and more.

12. *Strengthening the Partnership Between Teachers and Paraeducators,* **Kent Gerlach/Anna Lou Pickett.** Learn strategies to make your teacher-paraprofessional team work. You will discover how to build a collaborative relationship that will enhance instruction and help create a positive classroom environment.

13. *Behaviorally Anchored Supervision System (BASS): Leadership in Management,* **Stevan Kukic.** Explore the components of effective special education leadership. Learn how to use the BASS rating scales as tools for meaningful teacher evaluation of effective instructional strategies.

14. *Managing the Behavior of the Non-Compliant Student,* **Ennio Cipani**. Address noncompliant behavior. Collaborate with other teachers in implementing consistent procedures that will motivate students to embrace learning.

15. *Serving Preschool Children in Inclusive Settings: Administrative and Programmatic Issues,* **Phil Strain.** Focus on student assessment/diagnosis, inclusive delivery systems, appropriate learning routines, and developing IEP objectives for children ages 3-5.

16. *Educational Equity: Meeting the Needs of Gifted Middle Level Students,* **Paul George/Carol Tomlinson.** Explore the needs of gifted students within an equitable, integrated middle school. Examine curricular options, classroom practices, and educational philosophies that help shape needed systemic change.

17. *Attention Deficit Hyperactivity Disorder: Good News and Bad News,* **Ann B. Welch.** Learn behavioral and academic intervention strategies for students with hyperactivity, impulsivity, and inattentive behaviors. Gain information on characteristics of ADHD and strategies for working collaboratively with parents and professionals.

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